

Mammals of Montana

Montana Field Guide

Note

These PDF versions of the Montana Field Guide are intended to assist in offline identification and field work. They are not intended to replace the live Field Guide, as that version contains more information and is updated daily.

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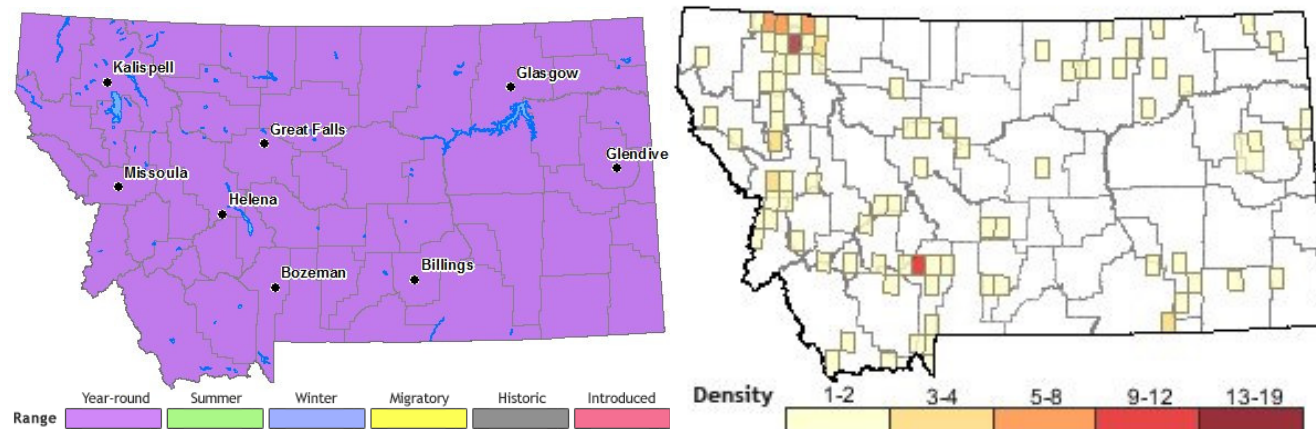
American Mink - *Mustela vison*

http://FieldGuide.mt.gov/detail_AMAJF02050.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 173

General Description

This medium-sized, semi-aquatic carnivore has a long, thin body; short, sturdy legs; short, pointed nose; short, rounded ears, and a dorsoventrally flattened head. Thickly furred tail. Usually rich dark brown in color with a white chin patch. Sometimes white spots on belly. Fur is soft and lustrous with long, glossy guard hairs. Dense pelage is its only obvious aquatic adaptation. Total length: 19 to 28 inches. Weight: 1.5 to two pounds. A medium-sized mammal with an elongate body, a long tail, small rounded ears, and relatively short legs; pelage is soft, luxurious, and generally rich brown to almost black dorsally; the underparts are paler, sometimes with a whitish chin patch and whitish spotting elsewhere; five digits on each foot; head to body 330 to 430 mm in males, 300 to 400 mm in females; tail 158 to 230 mm in males, 128 to 200 mm in females; mass 681 to 2310 g in males, 790 to 1089 g in females; basilar length of skull 58 to 69 mm (Nowak 1991, Hall 1981, Burt and Grossenheider 1964).

Habitat

Usually found along streams and lakes. Commonly occurs in marshes and beaver ponds. Permanence of water and dependable source of food are most important habitat components. Often uses den sites of other animals and is commonly found in association with Muskrats. Semi-aquatic forager. Can kill prey larger than itself. Chiefly nocturnal, territorial, and secretive. Dens underneath piles of brush or driftwood, under rocks, in hollow logs, and in houses or dens abandoned by Beavers or Muskrats. Very aggressive mating behavior. Wetland habitats - riverine, palustrine, lacustrine.

Arctic Shrew - *Sorex arcticus*

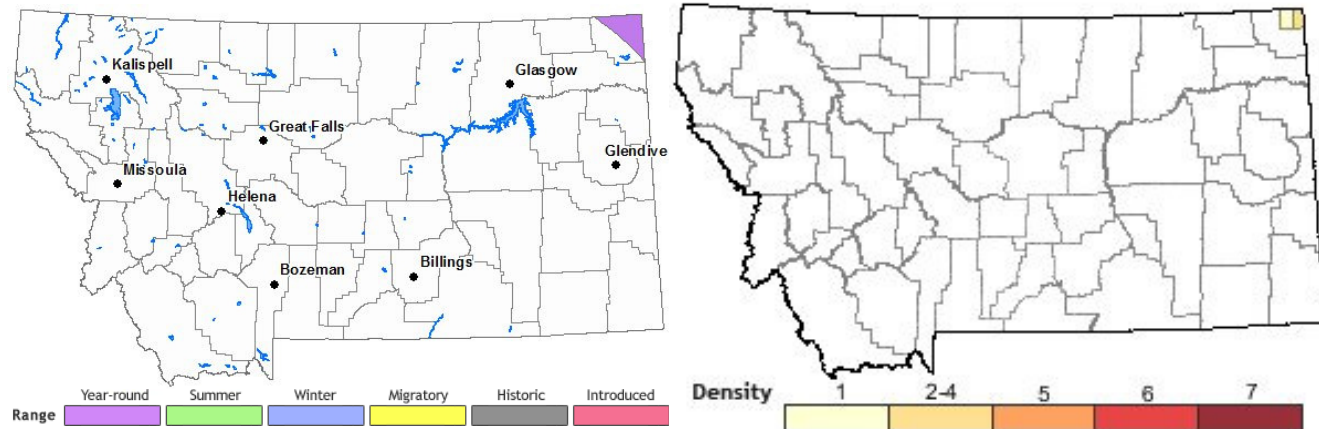
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Species of Concern

Global Rank: G5
State Rank: S1S3

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 5

General Description

The Arctic Shrew is a medium to large sized shrew. Adults possess a distinctive tri-colored pelage; the dorsum is very dark brown to black, the sides are lighter brown, and the underparts are grayish-brown. The tail is distinctly bicolored, darker above and lighter below. Ranges in external measurements (in millimeters) are: total length 100 to 125, tail length 36 to 45, hind foot 12 to 15, and a mass of 5.3 to 13.5 grams. Condylobasal length of the skull is 19.0 to 20.0 millimeters, palatal length is 8.1 to 8.7 millimeters, maxillary breadth is 4.8 to 5.5 millimeters, and the length of the maxillary tooth row is 6.7 to 7.9 millimeters (Junge and Hoffmann 1981, van Zyll de Jong 1983, Kirkland and Schmidt 1996). The skull has 32 teeth (dental formula: I 3/1, C 1/1, P 3/1, M 3/3); the 5 upper teeth with single cusps that are posterior to the first incisor are termed the unicuspid (U), and include 2 incisors, 1 canine, and 2 premolars. There is a medial tine on I1, and U3 is as large or larger than U4. On the lower jaw (mandible), the pigment is in two or three segments on I1 (the posterior extent of pigment on the ventromedial edge is restricted to about the first third), the height of the coronoid process is more than 4.3 millimeters, and the length of the dentary is greater than 7.8 millimeters (Carraway 1993).

Habitat

Few descriptions of habitat use by Arctic shrew in Montana are available. All individuals have been captured in wet meadow habitat adjacent to marshes or in the sandy flats of creek flood plains. Dominant plants included *Agropyron repens*, *Sonchus* spp., *Juncus balticus*, *Carex* spp., *Agropyron smithii*, *Distichlis spicata*; *Hordeum jubatum* was also present (Perry 2000, Foresman 2001).

Badger - *Taxidea taxus*

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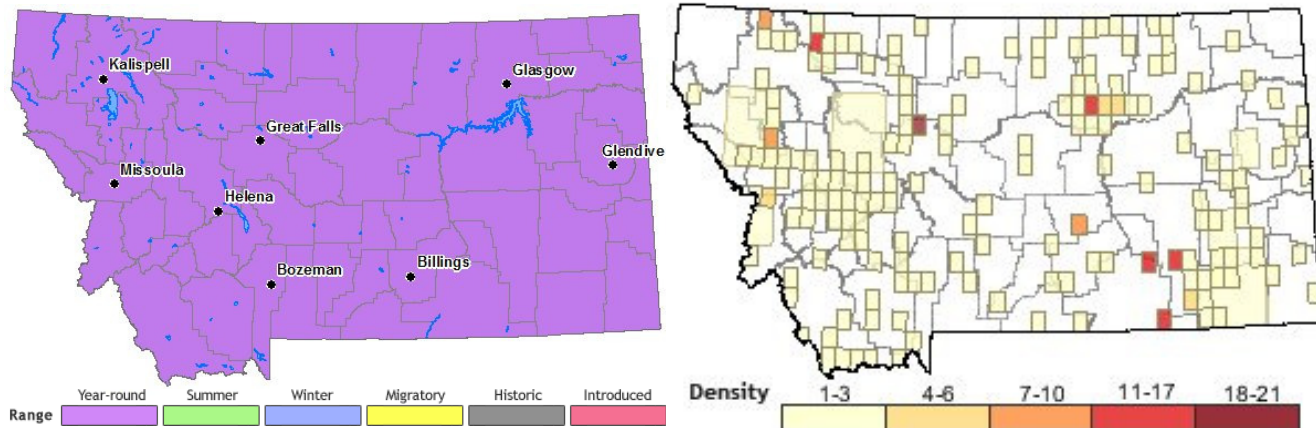
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 404

General Description

Remarkably adapted morphologically for burrowing and feeding on burrowing prey. A stout, compact, heavy-bodied animal built low to the ground, with partially webbed toes and long claws to aid in digging. It is the only true fossorial carnivore in North America and thus unique in appearance. A yellowish-gray mammal with a white stripe over the top of its head, white cheeks, black feet, and a black spot in front of each ear. The belly and short tail are yellowish. Pelage is composed of under-fur with longer guard hairs. Because of their shaggy coat and short stature, badgers appear to flow along the ground. Total length: 22 to 28 inches. Weight: 13 to 25 pounds. A heavy-bodied, short-legged mammal with long foreclaws, long fur (longest on the sides), and a short bushy tail; upperparts are yellowish gray to reddish brown, with a white middorsal stripe extending from the snout to the neck or shoulders in the north and usually to the rump in the south; black patches are present on the face and cheeks; underparts are buffy, except for the whitish chin, throat, and mid-ventral region; feet are dark brown to black; head and body length 42 to 72 cm, tail length 10 to 15.5 cm, mass 4 to 12 kg (Nowak 1991).

Habitat

Prefers open grasslands, shrub/grasslands, and deserts. Non-forested habitats with soils suitable for burrowing and

support of fossorial prey are favored. Mostly nocturnal, but also active during the day. Efficient digger, digs out small rodents. Dens in burrows of its own making.

Beaver - *Castor canadensis*

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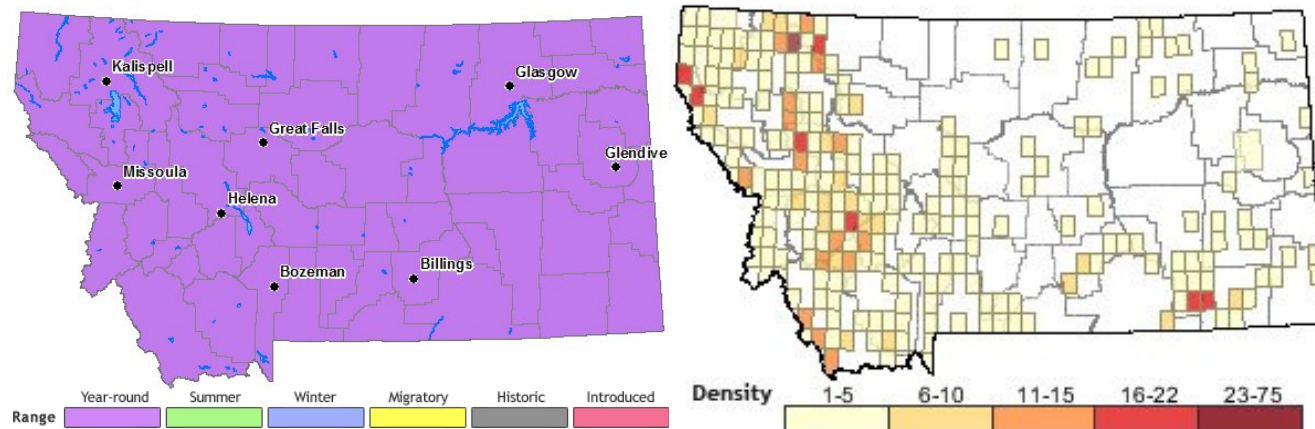
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1220

General Description

The largest rodent in North America north of Panama. On land is a large, clumsy, hump-backed animal. In the water, becomes sleek and torpedo-shaped. Propels itself with powerful webbed hind feet. Beavers use their large dorsally flattened, scale-covered tail to maneuver in water. Slapping the tail on water surface is used as a signal of alarm. Split nail on the second hind toe is used for grooming. Incisors are large and continually growing. Fur is rich brown with black to reddish guard hairs. Under-fur is soft and extremely dense with excellent insulating qualities. Both sexes have a pair of anal glands and castor sacs located ventrally. Beavers emit anal gland secretions year round. Total length: 34 to 40 inches. Weight: 30 to 60 pounds. Builds stick and mud dams across streams. Mostly nocturnal. May build large conical houses at the edge of a lake or burrow into the bank for a den along rivers. Beaver life is based on a family unit consisting of a pair of adults, yearlings, and kits. The information in next section is from Miller (1983), Hill (1982), and Novak (1987a), unless otherwise indicated. The beaver is the largest North American rodent; most adults weigh 16 to 23 kg (35 to 50 pounds), rarely 32 to 38 kg (70 to 85 pounds) or more. Kits weigh about 0.5 kg or a little less (1 pound) at birth (Hill 1982), when they are about 38 cm (15 inches) long (Schwartz and Schwartz 1981). The relationship between beaver age and mass is roughly as follows: less than 0.5 years old, less than 5 kg (11 pounds); 0.5 to 1.5 years old, 6 to 11 kg (13 to 24 pounds); 1.5 to 2.5 years old, 10 to 13 kg (22 to 29 pounds); greater than 2.5 years old, greater than 14 kg (31 pounds). The preceding weight-age data are often accurate, but it must be realized that weight is influenced by various factors other than age. The total length of a beaver varies with age as follows: yearlings are 26 to 34 inches; adults of 2 to 3 years, 35 to 40 inches; older adults, 47+ inches (maximum about 4.5 feet) in the warmer months and generally ends at age 4 to 5 years. Pelage color varies geographically from yellowish-brown to black (this range of color may be found in a single watershed). There is one annual molt. The pelt is prime from late fall to early spring. The sexes are difficult to distinguish externally. Hodgen (1978) provided information on sexing beavers by their behavior in a live trap.

See Novak (1987a) for additional references on sexing methods.

Habitat

Occupies a wide variety of habitats in North America. Water and associated woody vegetation are the most essential components of beaver habitat. Ideal beaver living sites include ponds, small lakes, meandering streams, and rivers.

Big Brown Bat - *Eptesicus fuscus*

http://FieldGuide.mt.gov/detail_AMACC04010.aspx



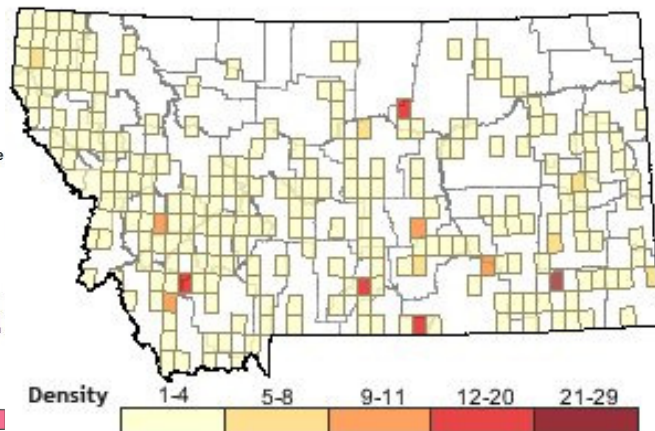
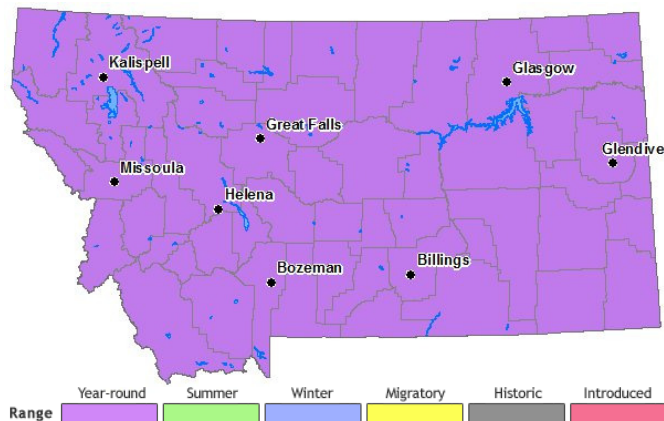
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 742

General Description

A larger bat with overall brown to copper-colored fur. The muzzle is distinctively round and dark. Forearm length is 43-52mm. The uropatagium is unfurred on the posterior half and a keel is present on the calcar.

Habitat

Summer day roosts include attics, barns, bridges, and bat houses. Hibernacula include caves and mines.

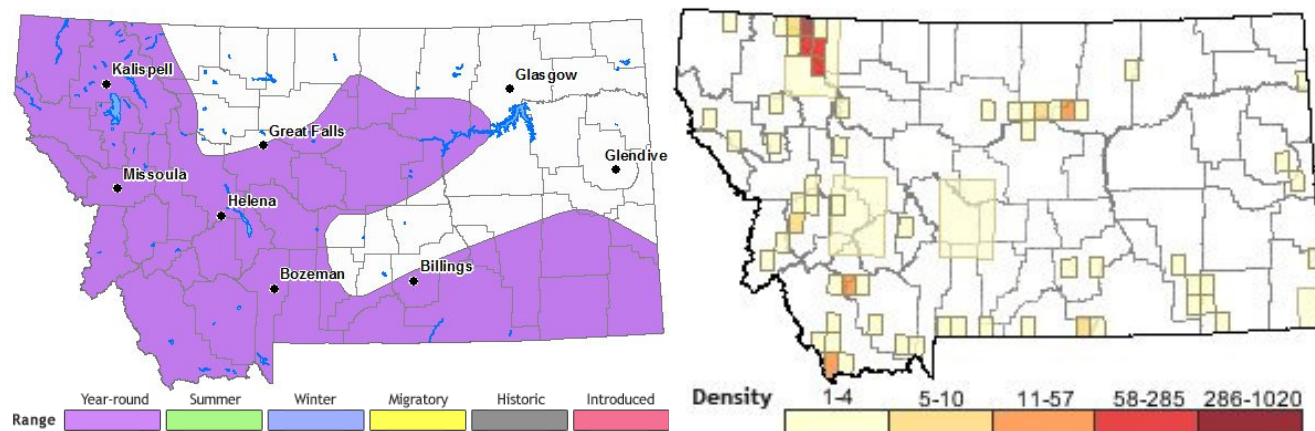
Bighorn Sheep - *Ovis canadensis*

http://FieldGuide.mt.gov/detail_AMALE04010.aspx



Global Rank: G4
State Rank: S4

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM:



Number of Observations: 2583

General Description

Coat grayish-brown with yellowish-white underparts; creamy-white rump patch around small brown tail; horns of adult rams massive and curled, up to 45 inches long; horns of adult ewes thin, slightly curved, 6 to 13 inches long; horns of yearling rams wider at the base with more divergent tips than those of ewes, and 7 1/2 to 17 inches long; old rams may exceed 300 lbs., ewes seldom exceed 150 lbs. Most sociable of Montana's big game species; herds segregate according to age and sex; ewes, lambs and yearling males band together; adult males band in herds spanning 2- or 3-year classes; subject to die-offs related to severe winter weather and pneumonia.

Habitat

Cliffs, mountain slopes, rolling foothills; sometimes cross intermountain valleys. Minimum snow depth most important in winter, available high quality green forage most important in spring and summer. Selected elevations vary accordingly. Immediate or nearby cliffy-rocky areas important year-round. Semi-open to open vegetation types preferred. Often use south aspects.

Bison - *Bos bison*

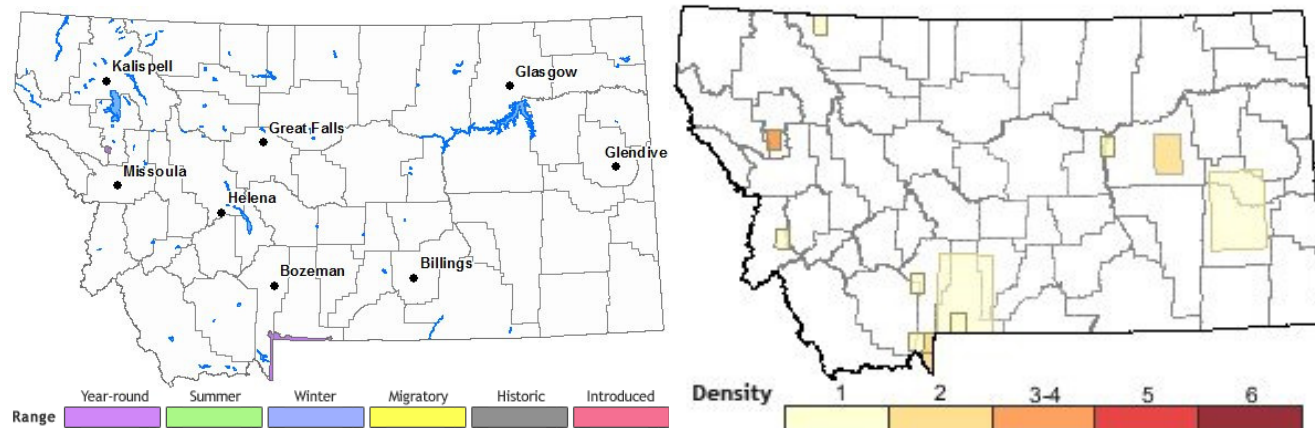
http://FieldGuide.mt.gov/detail_AMALE01010.aspx



Species of Concern

Global Rank: G4
State Rank: S2

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 19

General Description

Bison are the largest North American land animals with weights over 1000 kilograms recorded (Foresman 2001). They have a massive dark head with short black horns curving upward and inward from the base. A large mop of long dark hair covers the top of the head. The body is tall and narrow (1.8 meters at the shoulder) (Foresman 2001), with a distinctive large shoulder hump tapering toward the hindquarters. The tail is short and tufted at the end. The legs are relatively short. Adult Bison have heavy light brown hair covering their shoulders and forequarters blending to shorter darker hair from their shoulders back. The head, neck and front legs have dark hair as well. In summer, much of the hair on the hindquarters is lost. Male bison are proportionally larger and more robust than females. Calves are reddish in color but darken to adult pelage by their first fall.

Habitat

Because of restrictions, currently occupied habitat does not reflect the full natural range for Bison. Habitat consists of Palouse prairie and montane forest on the National Bison Range; the Yellowstone Park range is unavoidably at higher elevations with grassland interspersed with forest. Throughout their range, Bison inhabit open plains and grasslands. Woodlands and openings in boreal forest, meadows, and river valleys are used in the northern parts of their range. Like other large grazers, they are attracted to burned areas the next growing season (Shaw and Carter 1990). During the growing season at the Konza Prairie in northeastern Kansas, they preferred areas that had been burned in spring. Summer grazing was concentrated in large watershed area (79 to 119 hectares) dominated by warm-season, perennial C4 grasses. In fall and winter, they grazed both burned and unburned watersheds more uniformly, but grazed most intensively in areas with large stands of cool-season, C3 grasses (Vinton et al. 1993).

Black Bear - *Ursus americanus*

http://FieldGuide.mt.gov/detail_AMAJB01010.aspx



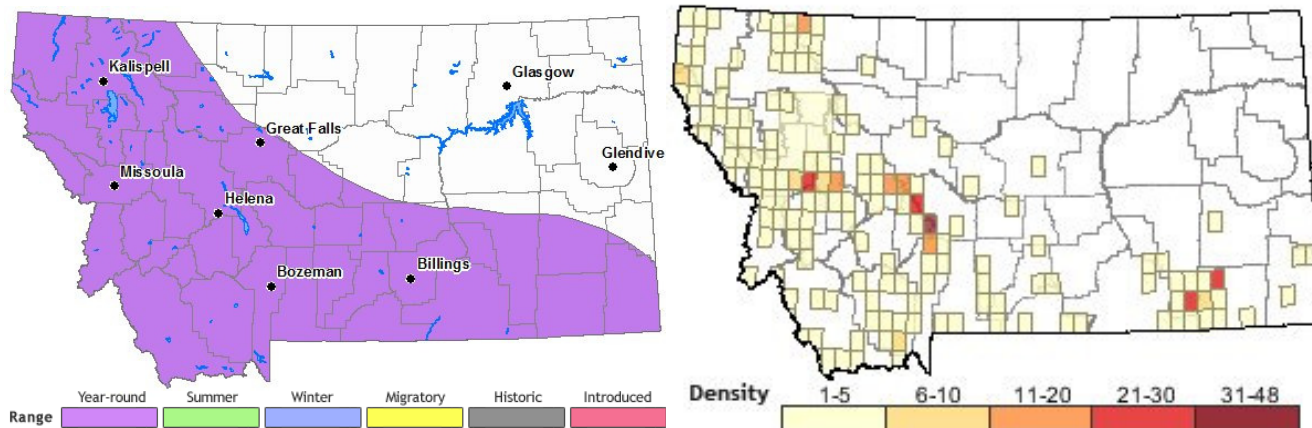
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 734

General Description

Coat black (often with white on chest), brown or blond; slight shoulder hump, but highest point of body above hips; muzzle straight and long in profile; claws of front feet dark, strongly curved, and shorter (seldom more than 1 1/2 inches) than those of Grizzly Bear; males weigh 180-250 lbs., occasionally up to 400 lbs.; females weigh 120-180 lbs. Largely nocturnal; usually solitary; dig less elaborate dens than Grizzly Bears, often in natural cavities (trees, rocks), under logs, brush piles, or even buildings; climb trees easily (MFWP). Pelage color varies, usually black in the eastern U.S., black, brown, cinnamon, blue-black, or whitish in western North America; snout brown, straight in profile; small rounded ears; five toes on both front and rear feet; head and body length 150-180 cm, tail about 12 cm, mass about 90-140 kg for females, 115-270 kg for males (Nowak 1991, Burt and Grossenheider 1964).

Habitat

Dense forests; riparian areas; open slopes or avalanche chutes during spring green-up (MFWP). Habitat use tied to seasonal food availability/plant phenology. Dry mountain meadows in early spring; snow slides, stream bottoms, wet meadows in early and mid-summer. May concentrate in berry and whitebark pine areas in fall (Barnes and Bray 1967, Tisch 1961, Jonkel and Cowan 1971).

Black-footed Ferret - *Mustela nigripes*

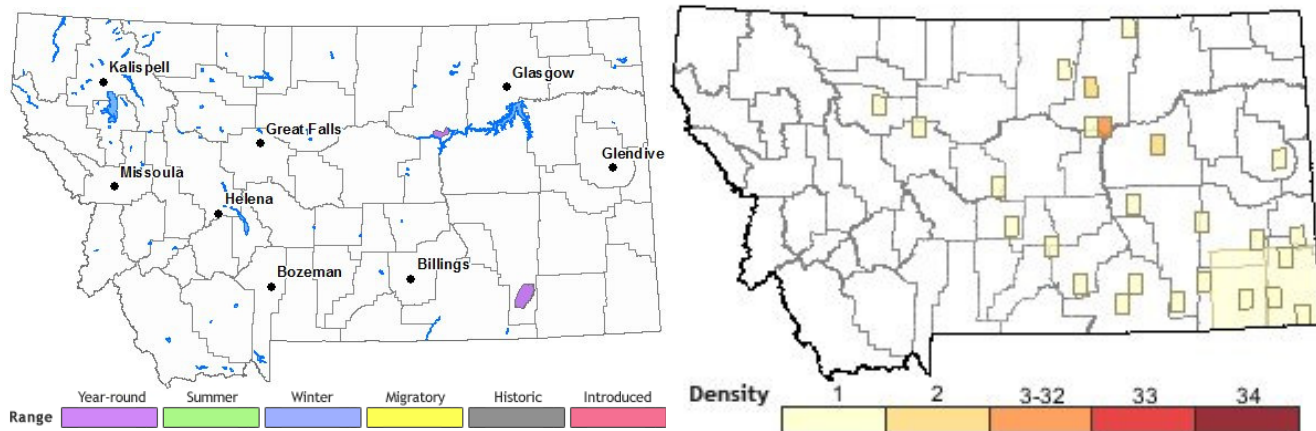
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Species of Concern

Global Rank: G1
State Rank: S1

AGENCY STATUS
USFWS: LE,XN
USFS: ENDANGERED
BLM: SPECIAL STATUS



Number of Observations: 61

General Description

Black-footed Ferrets are weasel-like in body shape and form but are heavier than other weasels. The torso is long with short legs and a long tail. The color of the body is a soft cream color with the ears, chin and throat fading to white. The dorsal portion of the torso is darker than the rest of the body. The legs and tip of the tail are dark brown and a mask of the same color extends in a band from below each eye across the forehead.

Habitat

Black-footed Ferrets are intimately tied to prairie dogs (*Cynomys* spp.) throughout their range and have only been found in association with prairie dogs. They are therefore limited to the same open habitat used by prairie dogs: grasslands, steppe, and shrub steppe. Black-footed Ferrets do not dig their own burrows and rely on abandoned prairie dog burrows for shelter. Only large complexes (several thousand acres of closely spaced colonies) can support and sustain a breeding population of Black-footed Ferrets. It has been estimated that about 40 to 60 hectares of prairie dog colony is needed to support one Black-footed Ferret, and females with litters have never been found on colonies less than 49 hectares (Miller et al. 1996). Black-footed Ferrets scent-mark to maintain spatial separation (Richardson 1986).

Black-tailed Jack Rabbit - *Lepus californicus*

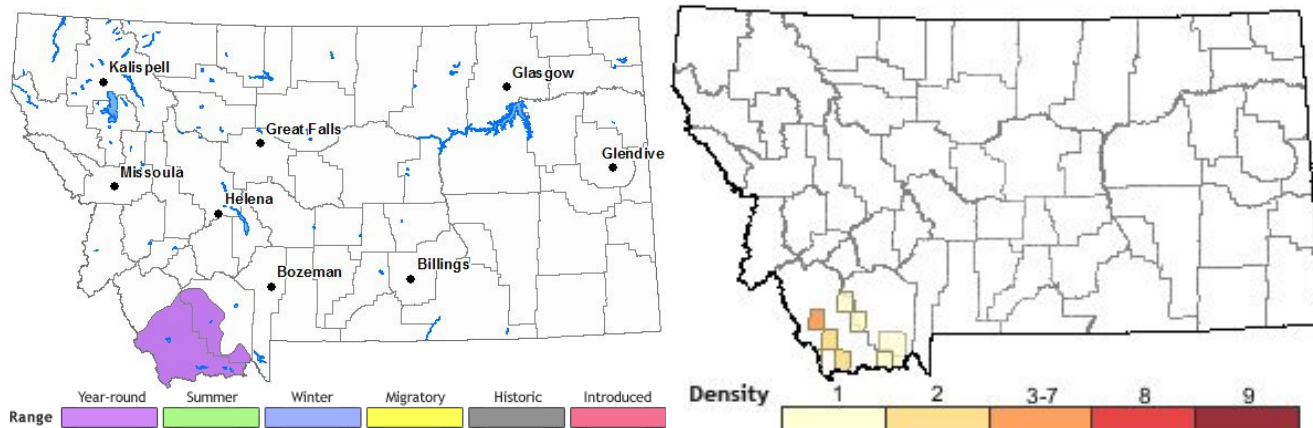
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Species of Concern

Global Rank: G5
State Rank: S2

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 17

General Description

The common name Black-tailed Jack Rabbit is derived from the prominent black coloration on the dorsal surface of the tail (the ventral side is colored white). The Black-tailed Jack Rabbit is a medium sized hare with exceptionally long ears and hind legs. The average weight of two male specimens from Montana was 2.0 kilograms; and 2.6 kilograms for four non-pregnant females (Foresman 2001b). Both males and females have a musky odor that originates from two rectal glands (Vorhies and Taylor 1933). The pelage is grayish-brown to grayish-black in coloration, and the black tail is quite distinct. Juveniles possess a darker coat that is replaced by the paler, adult pelage in six to nine months (Haskell and Reynolds 1947). An annual molt occurs in adults between late August and early October depending on latitude. The supraorbital process of the skull is pronounced, and both the rostrum and braincase are long and slender. The skull contains a total of 28 teeth and the dental formula is: I 2/1, C 0/0, P 3/2, M 3/3 (Best 1996).

Habitat

No information is available for Montana, however, in other portions of its range the Black-tailed Jack Rabbit is known to occupy a small range of habitats, including open plains, fields, and deserts (Caire et al. 1989). In the United States it has often been reported that populations increase with heavy cattle grazing (Taylor and Lay 1944,

Tiemeier 1965), and in Mexico the species occupies desert habitats and grasslands that have been grazed almost to bare ground (Leopold 1959). A single study from Colorado indicated that the species preferred light to moderate grazing (Flinders and Hansen 1795), but in all cases, Black-tailed Jack Rabbits are associated with open country with scattered shrubs or cacti for cover. The species is known to occur at elevations ranging from 84 meters below to 3,750 meters above sea level (Best 1996).

Black-tailed Prairie Dog - *Cynomys ludovicianus*

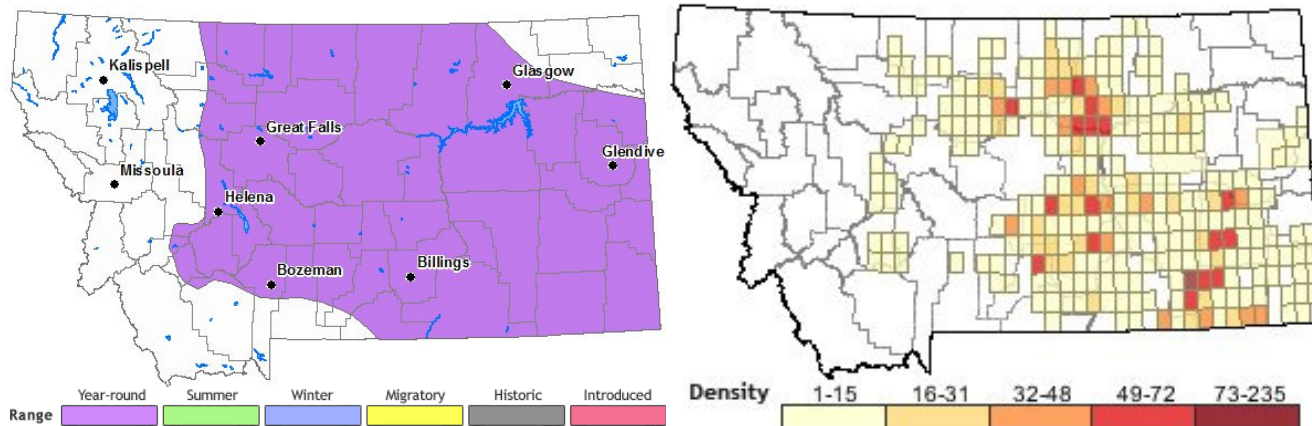
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Species of Concern

Global Rank: G4
State Rank: S3

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 5623

General Description

The Black-tailed Prairie Dog is the largest of the prairie dog species, weighing 700 to 1500 grams and measuring 28 to 33 centimeters from nose to tail (Burt and Grossenheider 1976, Hoogland and Foltz 1982). The overall color of the back and upper sides of the body and tail is generally dark cinnamon with buff coloring on the underside (Anderson 1972, Burt and Grossenheider 1976, Hall 1981). The distal third of the tail is black or dark brown (Hall 1981). They molt twice per year, prior to summer and prior to winter. The skull is about 60 centimeters long, with 22 teeth (Burt and Grossenheider 1976).

Habitat

Black-tailed Prairie Dog colonies are found on flat, open grasslands and shrub/grasslands with low, relatively sparse vegetation. The most frequently occupied habitat in Montana is dominated by western wheatgrass, blue grama and big sagebrush (MFWP 2002). Colonies are associated with silty clay loams, sandy clay loams, and loams (Thorp 1949, Bonham and Lerwick 1976, Klatt and Hein 1978, Agnew et al. 1986) and fine to medium textured soils are preferred (Merriam 1902, Thorp 1949, Koford 1958), presumably because burrows and other structures tend to retain their shape and strength better than in coarse, loose soils. Encroachment into sands (e.g., loamy fine sand) occurs if the habitat is needed for colony expansion (Osborn 1942).

Shallow slopes of less than 10% are preferred (Koford 1958, Hillman et al. 1979, Dalsted et al. 1981), presumably in part because such areas drain well and are only slightly prone to flooding. By colonizing areas with low vegetative stature, Black-tailed Prairie Dogs often select areas with past human (as well as animal) disturbance. In Montana, colonies tended to be associated with areas heavily used by cattle, such as water tanks and long-term supplemental feeding sites (Licht and Sanchez 1993, FaunaWest 1998).

Bobcat - *Lynx rufus*

http://FieldGuide.mt.gov/detail_AMAJH03020.aspx



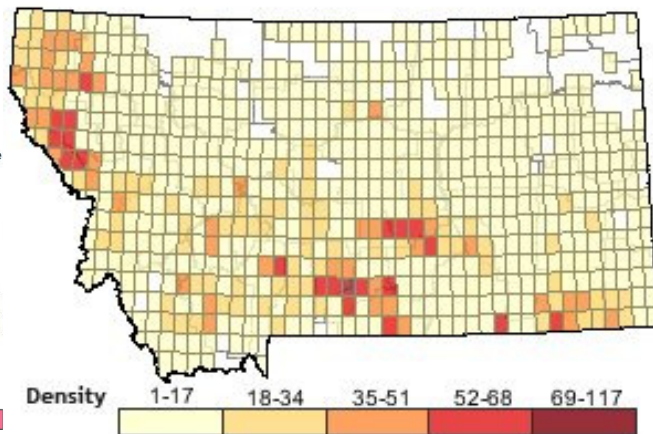
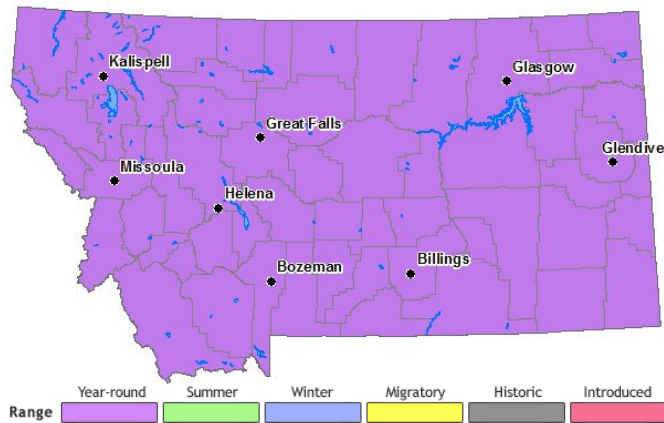
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 13691

General Description

The Bobcat is about twice the size of a domestic cat and is the smallest of our native cats. Individuals exhibit considerable variation in color. Base coloration can be light gray, yellowish-brown, buff, brown, or reddish-brown. Under-parts and inside of legs are white with black or dark brown spots. Facial fur is often streaked with black. Dorsal surfaces of the ears are black with a prominent white spot. Short tuft of black hair is present on the ears. This cat has a short tail, black only on the upper portion of the tip. Bobcat fur is short, dense, and soft. Retractable claws. Total length: 28 to 37 inches. Weight: 15 to 35 pounds.

Habitat

Utilizes wide variety of habitats; known to be an animal of "patchy" country. Prefers rimrock and grassland/shrubland areas. Often found in areas with dense understory vegetation and high prey densities. Natural rocky areas are preferred den sites. May be active during all hours but is primarily nocturnal. Solitary animal that is difficult to observe in the wild. In central MT, selected for cover types (52+% canopy cover) corrected with high prey densities (Knowles 1981). In western MT, den sites within caves, between boulders, in hollow logs, or abandoned mine shafts (Brainerd 1985).

Bushy-tailed Woodrat - *Neotoma cinerea*

http://FieldGuide.mt.gov/detail_AMAFF08090.aspx



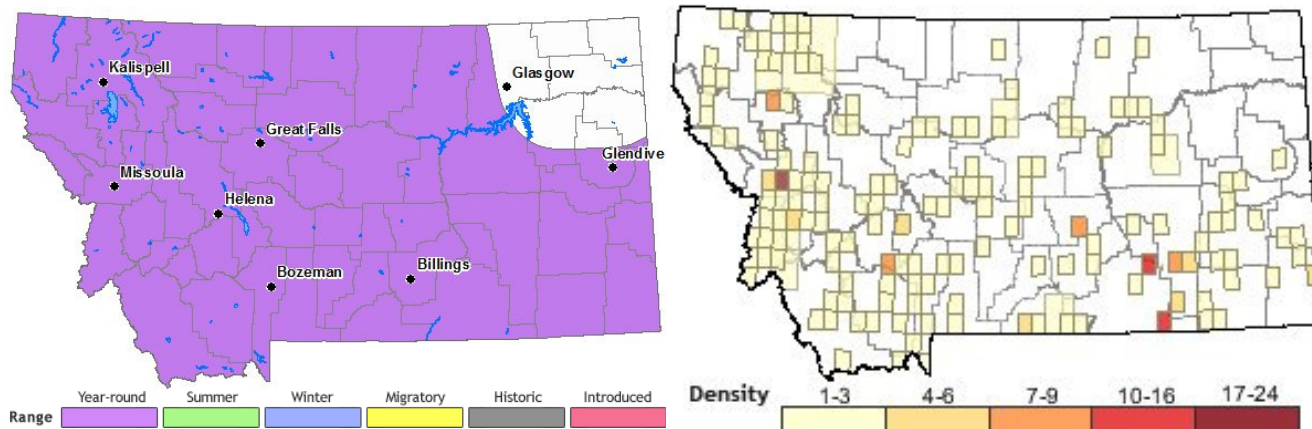
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 396

General Description

The Bushy-tailed Woodrat (the legendary pack rat of western stories) grows to approximately 15 inches and 11 ounces in Montana. Together with its flat, squirrel-like tail, long full whiskers, large hairless ears, protruding eyes, and its size make it easy to recognize. Its coloring is lead gray on the back and outside and white, pinkish or buff on the feet, ears, and belly (Foresman 2001). It may also have black or dark brown hairs on the back, giving it a darker appearance. Juveniles can have blue-gray fur on top (Kritzman 1977).

Habitat

Occurs in crevices where there are large amounts of sticks, leaves & other debris used to build nest. Rockslides, rocky slopes, abandoned homesites, badlands. Occasionally lodges nest in tree forks high above ground (Hoffmann and Pattie 1968, Adelman 1979, Dood 1980).

California Myotis - *Myotis californicus*

http://FieldGuide.mt.gov/detail_AMACC01120.aspx



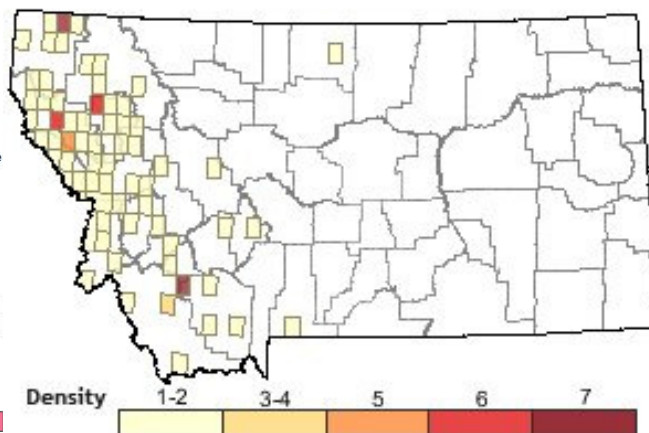
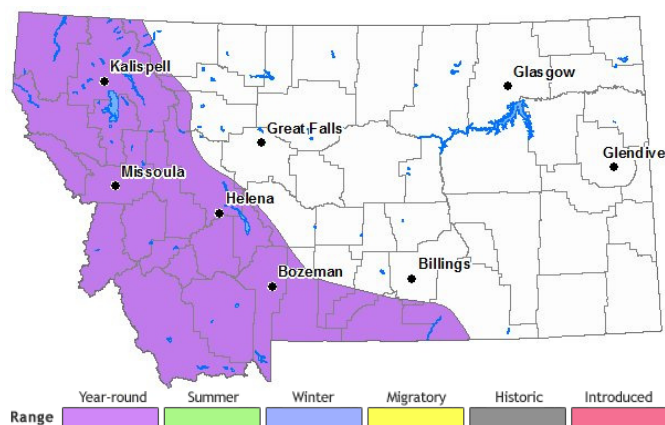
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 137

Habitat

No available information

Canada Lynx - *Lynx canadensis*

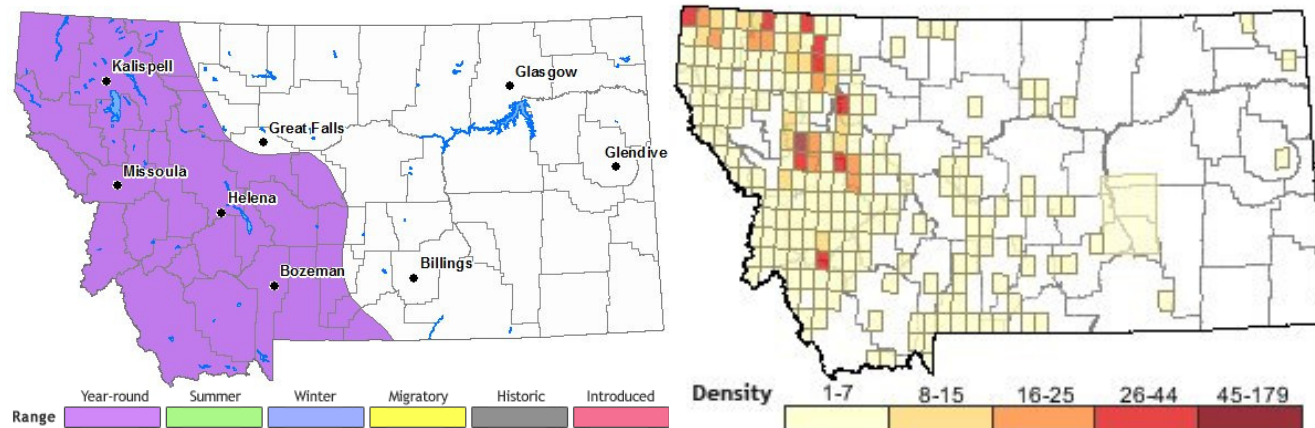
http://FieldGuide.mt.gov/detail_AMAJH03010.aspx



Species of Concern

Global Rank: G5
State Rank: S3

AGENCY STATUS
USFWS: LT
USFS: THREATENED
BLM: SPECIAL STATUS



Number of Observations: 1905

General Description

The Canada Lynx is a medium-sized cat (about 10 kilograms for males and 8 kilograms for females) with silver-gray to grayish-brown upperparts and a white belly and throat. Lynx have long legs and a relatively short, compact body. The total length averages approximately 92.5 centimeters for males and 89.5 centimeters for females (Foresman 2001). A facial ruff surrounds the face except directly beneath the snout. The facial ruff is longest on either side of the snout and has black markings on these longest hairs. The ears are 70 to 80 millimeters long and have a long, 30 millimeters black tuft at the end. The backs of the ears are darker than the rest of the body and have a central white spot. The feet are large and round (10 x 10 centimeters) and heavily furred (Foresman 2001). The tail is short and the tip is entirely black.

Habitat

Canada Lynx west of the Continental Divide generally occur in subalpine forests between 1,220 and 2,150 meters in stands composed of pure lodgepole pine but also mixed stands of subalpine fir, lodgepole pine, Douglas-fir, grand fir, western larch and hardwoods (J. Squires pers. comm. 1999 in Ruediger et al. 2000). In extreme northwestern Montana, primary vegetation may include cedar-hemlock habitat types (Ruediger et al. 2000). East of the Continental Divide the subalpine forests inhabited by Canada Lynx occur at higher elevations (1,650 to 2,400 meters) and are composed mostly of subalpine fir. Secondary habitat is intermixed Englemann spruce and Douglas-fir habitat types where lodgepole pine is a major seral species (Ruediger et al. 2000). Throughout their range, shrub-steppe habitats may provide important linkage habitat between the primary habitat types described above (Ruediger et al. 2000). Typical snow conditions are important factors for Canada Lynx, with occurrence primarily in habitats that also receive relatively uniform and moderately deep snowfall amounts (total annual snowfall of 100 to 127 centimeters) (Kelsall et al. 1977). Within these habitat types, disturbances that create early successional stages such as fire, insect infestations, and timber harvest, provide foraging habitat for lynx by creating forage and cover

for Snowshoe Hares, although older forests also provide habitats for Snowshoe Hares and Canada Lynx for longer periods of time than disturbance-created habitats (Ruediger et al. 2000).

Canada Lynx avoid large openings but often hunt along edges in areas of dense cover (Ruediger et al. 2000). When inactive or birthing, they occupy dens typically in hollow trees, under stumps, or in thick brush. Den sites tend to be in mature or old-growth stands with a high density of logs (Koehler 1990, Koehler and Brittell 1990). These habitats must be near or adjacent to foraging habitat because the hunting range of the female is reduced during this time (Ruediger et al. 2000).

In the South Fork Flathead, Canada Lynx were mostly located in fire-created, densely stocked young stands of lodgepole pine where Snowshoe Hares were most abundant. No locations in open or semi-open areas were observed (Koehler et al. 1979). In the Garnet Range, most were found in subalpine fir forest (Smith 1984). Denning sites are found in mature and old-growth lodgepole pine, spruce, and subalpine fir forests with a high density of logs (Koehler 1990, Koehler and Brittell 1990). Denning stands need not be large (1 to 3 hectares) but several stands should be interconnected (Koehler and Brittell 1990). Canada Lynx require cover for stalking and security, and usually do not cross openings wider than 100 meters (Koehler and Brittell 1990).

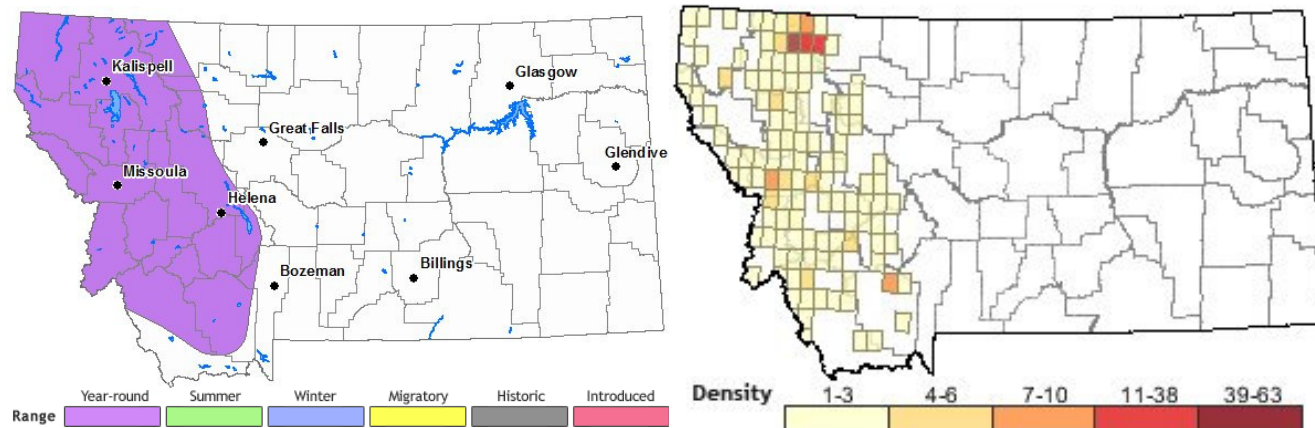
Columbian Ground Squirrel - *Urocitellus columbianus*

http://FieldGuide.mt.gov/detail_AMAFB05070.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 468

General Description

The Columbian Ground Squirrel is easily distinguished from other Montana ground squirrels by its larger size and distinctive coloration. An average adult weighs more than a pound. Its head and body measure 10 to 12 inches in length. The tail is 3 to 5 inches long and tends to be bushy, particularly when the squirrel is excited. Reddish-brown fur is found on the nose, forelegs, and hindquarters. The back and upper limbs are mottled gray and brown (Montana Department of Agriculture 1985).

Habitat

Intermontane valleys, open woodland, subalpine meadows, even alpine tundra (Hoffmann and Pattie 1968). Subalpine basins, clearcuts, and other disturbed areas (Ramirez and Hornocker 1981). At high elevations, may use rockslides/forage in meadows. Prefers grasslands and sedges.

Coyote - *Canis latrans*

http://FieldGuide.mt.gov/detail_AMAJA01010.aspx



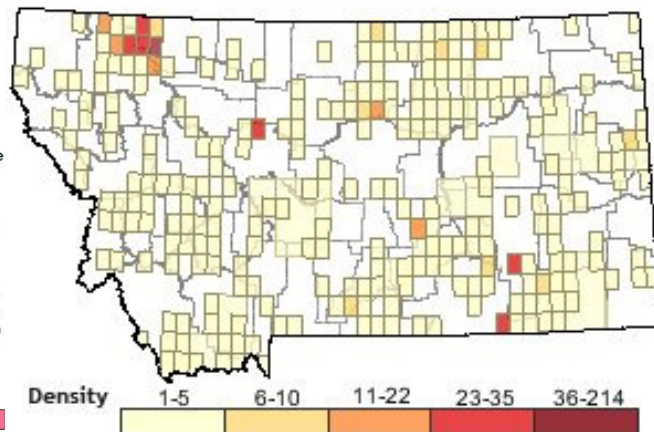
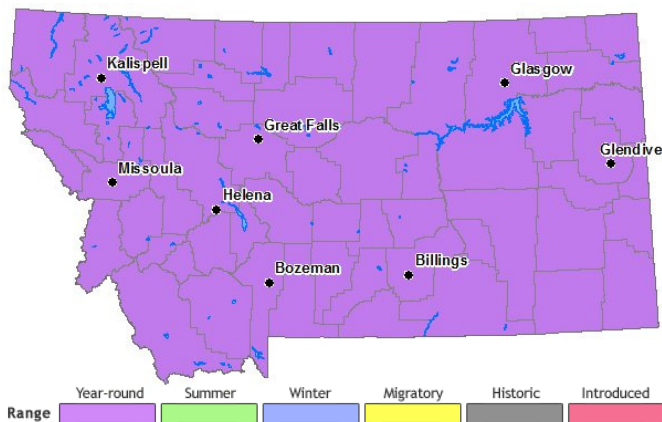
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1389

General Description

Like a medium-sized dog in appearance. Nose more pointed and tail bushier than most dogs. Larger than the Red Fox and much smaller than Gray Wolf. Tail held down between legs when running. Long, dense fur. Pelt gray or reddish-gray, with rusty legs, feet, and ears. Throat and belly whitish. Total length: 43 to 53 inches. Weight: 30 to 40 pounds.

Habitat

Utilizes almost any habitat, including urban areas, where prey is readily available. Prefers prairies, open woodlands, brushy or boulder-strewn areas. Coyote abundance is tied to food availability. Mainly nocturnal, true scavenger, territorial. Kills large animals by attacking the throat. Adaptable. Occupies diverse habitats.

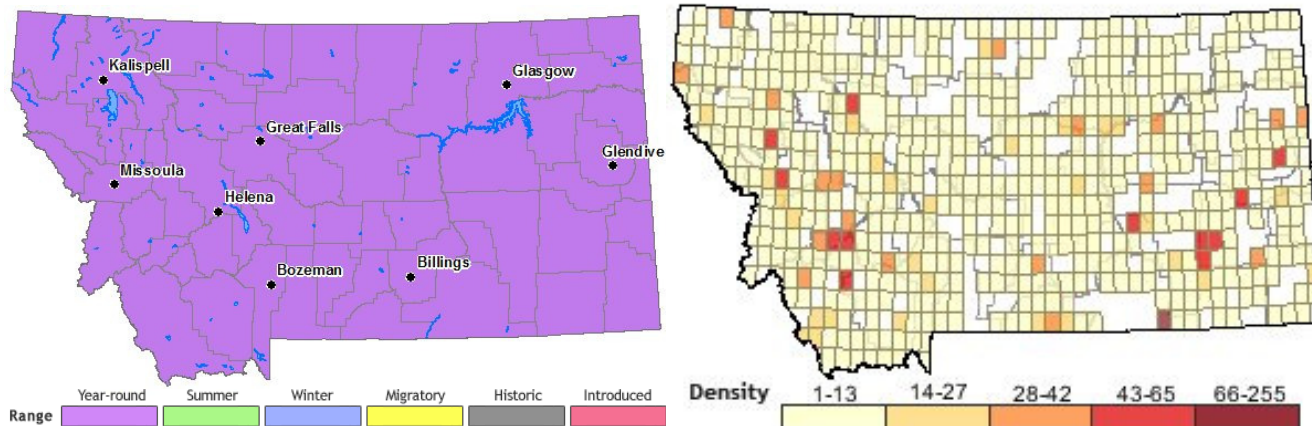
Deer Mouse - *Peromyscus maniculatus*

http://FieldGuide.mt.gov/detail_AMAFF03040.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 5997

General Description

The Deer Mouse in Montana measures approximately 6 1/2 inches long, including its tail, and weighs under an ounce. Throughout the Intermountain West it varies in color from pale gray to dark reddish brown on its back and upper tail. Its belly, legs and feet, and the underside of its tail are white. Although the upper fur grades to a lighter color along the sides, it is distinguished by the sharp definition between top and underside. In addition, the Deer Mouse's large, lightly haired ears and big eyes, suited for its nocturnal habits and under-the-snow winter life, help to identify it (Foresman 2001).

Habitat

In virtually all habitats - sagebrush desert, grasslands, riparian areas, montane, subalpine coniferous forests & alpine tundra (Pattie 1967, Hoffmann and Pattie 1968, Metzgar 1979). Usually not seen in wetlands (Jones et al. 1983).

Desert Cottontail - *Sylvilagus audubonii*

http://FieldGuide.mt.gov/detail_AMAEB01070.aspx



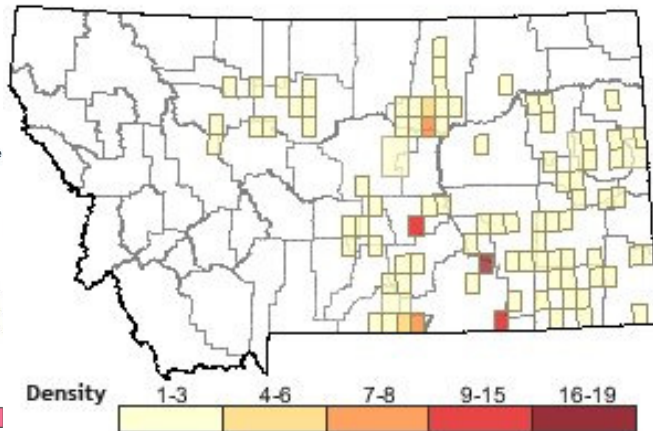
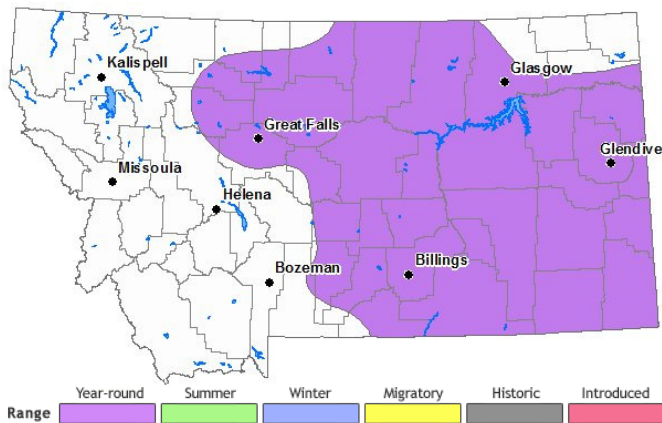
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 203

Habitat

Arid grasslands and sagebrush areas. In badlands and sagebrush coulees. Nests are pear-shaped excavations in the ground, cavity lined with vegetation and fur.

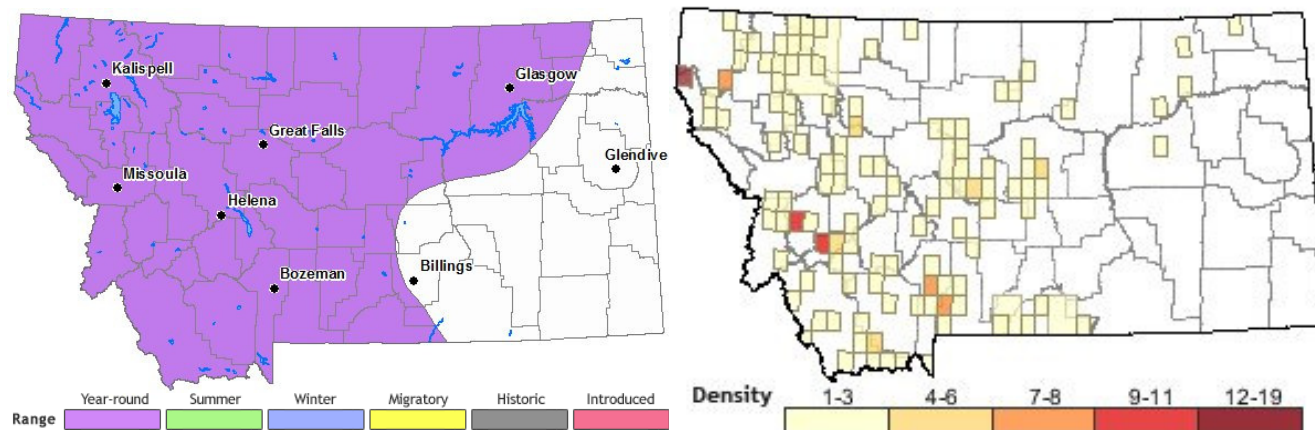
Dusky or Montane Shrew - *Sorex monticolus*

http://FieldGuide.mt.gov/detail_AMABA01080.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 282

General Description

Pacific coast: pelage gray brown; median tine on anteriomedial edge of I1 usually large and robust; tail indistinctly bicolored; 5 or 6 pairs of friction pads on second to fourth digits of hind feet; level of pigmentation above level of median tine on I1; body size small to medium; U5 triangular, body of U1s not touching, P4 overlapping U5; zygomatic process of maxillary pointed (Carraway 1990).

Habitat

In western Montana, high altitude spruce-fir forest, alpine tundra. Also as low as 3000 ft. in mid-altitude forests. Occurs along streams and rivers east of Continental Divide and in isolated mountain ranges in central Montana (Hennings and Hoffmann 1977).

Dwarf Shrew - *Sorex nanus*

http://FieldGuide.mt.gov/detail_AMABA01130.aspx



Species of Concern

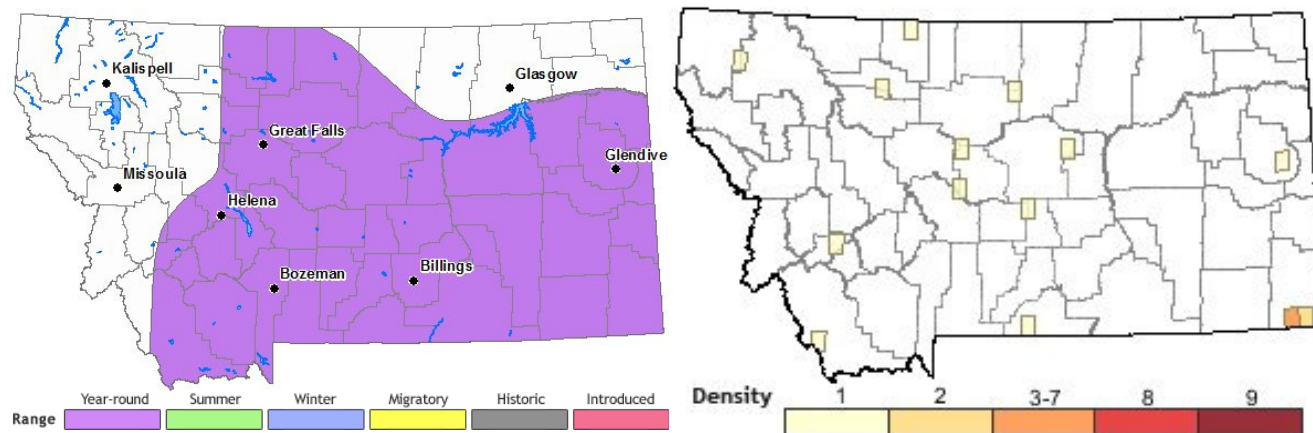
Global Rank: G4
State Rank: S2S3

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 21

General Description

The Dwarf Shrew is a small, grayish-brown shrew. Summer pelage is brown above, gray and somewhat buffy below; the tail is indistinctly bicolored to the tip, dark above and buff below; the winter pelage is paler and grayer, especially dorsally. Ranges in external measurements (in millimeters) are: total length 82 to 105, tail length 27 to 45, mass 1.8 to 3.2 grams. Condylbasal length of the skull is less than 15.2 millimeters. The skull has 32 teeth (dental formula: I 3/1, C 1/1, P 3/1, M 3/3); the 5 upper teeth with single cusps that are posterior to the first incisor are termed the unicuspid (U), and include 2 incisors, 1 canine, and 2 premolars. There is a medial tine on I1, and U3 and U5 are smaller than U4 (Hoffmann and Owen 1980, Junge and Hoffmann 1981).

Habitat

In general, the Dwarf Shrew is found in a variety of habitats, including rocky areas and meadows in alpine tundra and subalpine coniferous forest (spruce-fir), rocky slopes and meadows in lower-elevation forest (e.g., ponderosa pine, aspen, Douglas-fir) with a mixed shrub component, sedge marsh, subalpine meadow, arid sagebrush slopes, arid shortgrass prairie, dry stubble fields, and pinyon-juniper woodland (Hoffmann and Owen 1980, Berna 1990, Kirkland et al. 1997, Rickart and Heaney 2001, Hafner and Stahlecker 2002).

Habitats where Dwarf Shrews have been documented in Montana are similar in variety to those occupied elsewhere in the global range. Many have been taken in rocky locations in alpine terrain and subalpine talus (2 to 10 centimeters diameter) bordered by spruce-fir, lodgepole pine, or Douglas-fir and aspen; lesser numbers have been captured in montane grassland, sagebrush-grassland with 22% bare ground, and prairie riparian habitat dominated by green ash, rose, and timothy (Hoffmann and Taber 1960, Pattie and Verbeek 1967, Hoffmann et al. 1969, Thompson 1977, MacCracken 1985, Foresman 2001).

Eastern Cottontail - *Sylvilagus floridanus*

http://FieldGuide.mt.gov/detail_AMAEB01040.aspx



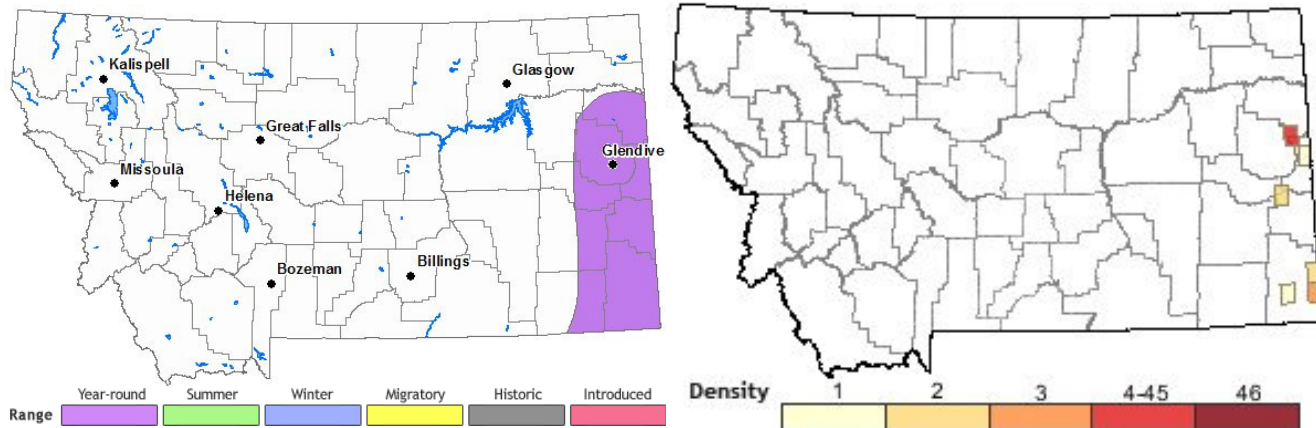
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 54

Habitat

Eastern Cottontails can be found in riparian habitats and brushy thickets.

Eastern Fox Squirrel - *Sciurus niger*

http://FieldGuide.mt.gov/detail_AMAFB07040.aspx



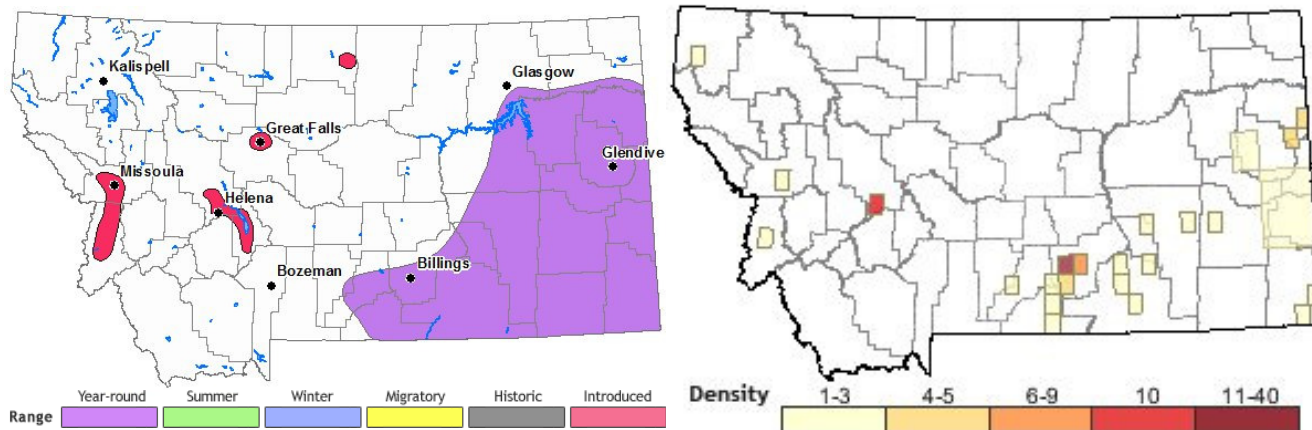
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 99

General Description

A large squirrel that is highly variable in color, both individually and geographically. Over most of the range, the pelage is rusty yellowish with a pale yellow to orange (or light gray to dirty white) belly and a bushy tail bordered with fulvous-tipped hairs. In the Southeast, body may be sprinkled with yellow, white, and black, with the head mostly blackish except for the whitish nose and ears. In the vicinity of the Delmarva Peninsula, color may be pure steel-gray with no fulvous (Burt and Grossenheider 1964). Melanism is not uncommon. For adults, total length is 454 to 698 mm, tail length is 200 to 330 mm, and hind foot length is 51 to 82 mm (Hall 1981). Mass is 696 to 1361 g, with an average of about 800 g. There is a total of 20 teeth. The bones fluoresce bright red under longwave ultraviolet light (unique among normal adult mammals) (Flyger and Gates 1982). The Eastern Fox Squirrel of the southeastern Coastal Plain of North America is the largest tree squirrel in the western hemisphere. Weigl et al. (1989) reported an average mass of 1006 g in North Carolina and 962 g for 44 specimens collected in the Carolinas and northern Georgia. Western Fox Squirrels tend to be smaller (600 to 900+ g).

Habitat

Riparian cottonwood forests. Riparian stands of box elder, green ash, plains cottonwood, and willow and town parks. More prone to open forests than *S. carolinensis*.

Eastern Gray Squirrel - *Sciurus carolinensis*

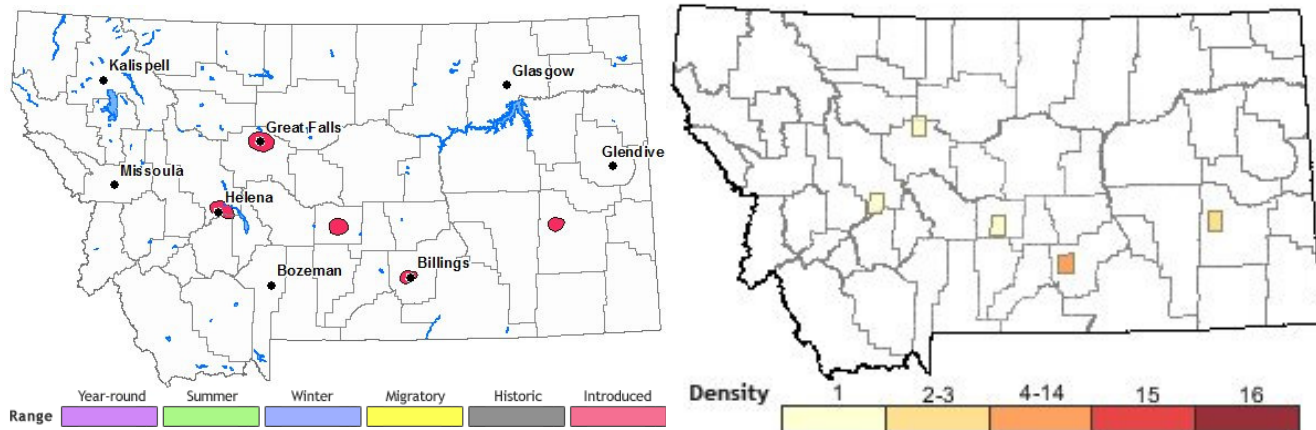
http://FieldGuide.mt.gov/detail_AMAFB07010.aspx



Exotic Species (not native to Montana)

Global Rank: G5
State Rank: SNA

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 20

Habitat

Native to eastern broad-leaved deciduous forests, thrives in Climax Forest.

Eastern Red Bat - *Lasiurus borealis*

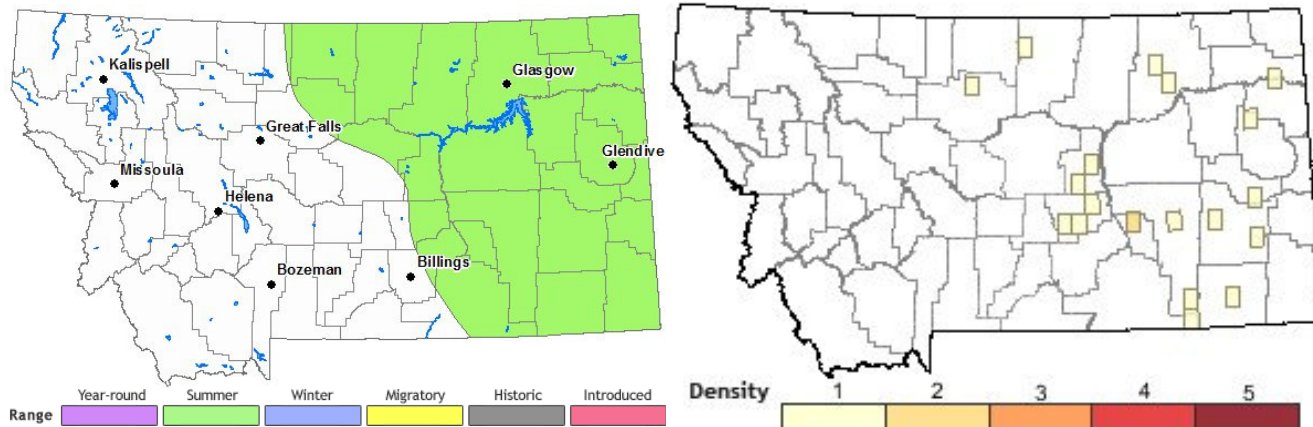
http://FieldGuide.mt.gov/detail_AMACC05010.aspx



Species of Concern

Global Rank: G5
State Rank: S2S3

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 21

General Description

The Eastern Red Bat is a moderately-sized lasurine (7 to 15 g) with long pointed wings and heavily-furred interfemoral membrane. Pelage overall is reddish, lighter on the belly than the back. Ears are low and rounded, tragus triangular, forearm length about 39 to 41 mm. It has large teeth; the dental formula is I 1/3, C 1/1, P 2/2, M 3/3 (Shump and Shump 1982a, Adams 2003).

Habitat

The Eastern Red Bat migrates through eastern Montana, particularly along wooded and riparian areas. In other parts of its range, it is reported to prefer elm, box elder, wild plum, willow, hawthorn, sumac, and a variety of other woody plants for roosting, and hibernates in woodpecker holes, tree foliage, and under loose bark (Shump and Shump 1982a, Jones et al. 1983, van Zyll de Jong 1985).

Elk - *Cervus canadensis*

http://FieldGuide.mt.gov/detail_AMALC01010.aspx



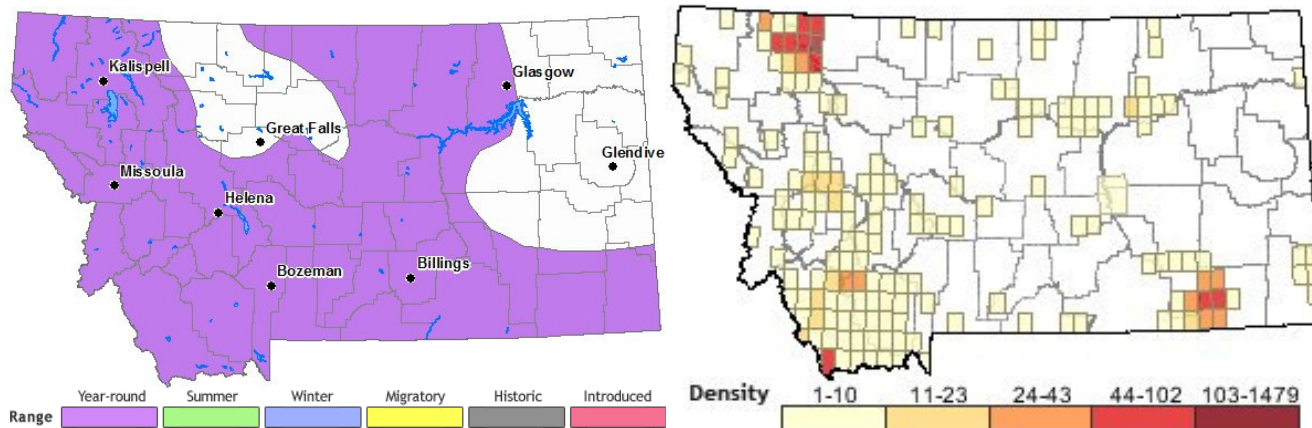
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 4618

General Description

Coat brown (pale yellowish in old bulls); head, neck, and legs darker than the rest of body; distinctive rump patch yellowish to almost orange; mane or ruff longer in bulls than in cow; antlers of mature bulls generally have five tines projecting from the main branch for a total of six points; bulls can weigh more than 1,000 lbs. before the rut but seldom exceed 900 lbs. during hunting season; cows weigh 500 to 600 lbs. in bitterbrush hillsides in winter. Strong herding instinct; old cows usually lead summer herds of cows, calves, and yearling (spike) bulls; in western Montana, Elk usually summer at higher elevations and move down to grass and/or shrub winter ranges (with nearby trees for thermal cover); habitat use strongly influenced by human activities.

Habitat

Mainly coniferous forests interspersed with natural or man-made openings (mountain meadows, grasslands, burns, and logged areas). Varies between populations and areas. Basic habitat components: security, shelter (may use to maintain thermal equilibrium) and forage production. Moist sites preferred in summer. High open road densities reduce habitat effectiveness. Good winter range critical.

Feral Horse - *Equus caballus*

http://FieldGuide.mt.gov/detail_AMATA01010.aspx



Exotic Species (not native to Montana)

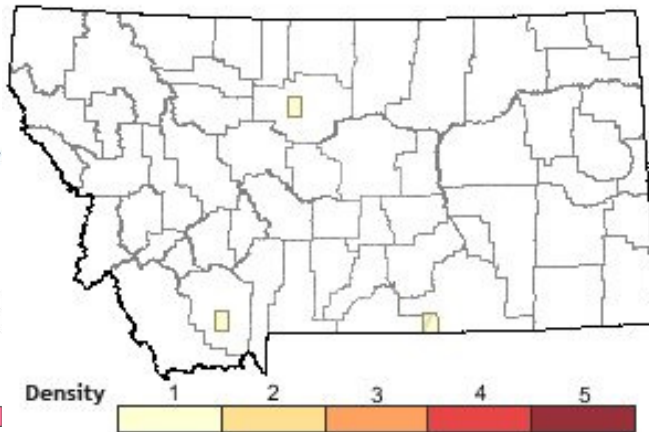
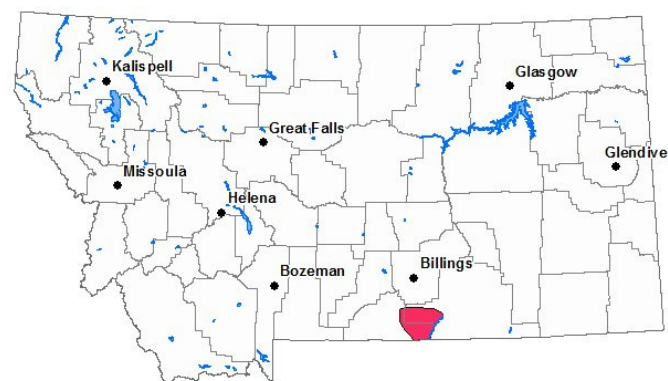
Global Rank: GNA
State Rank: SNA

AGENCY STATUS

USFWS:

USFS:

BLM:



Range Year-round Summer Winter Migratory Historic Introduced

Density 1 2 3 4 5

Number of Observations: 3

Fisher - *Martes pennanti*

http://FieldGuide.mt.gov/detail_AMAJF01020.aspx

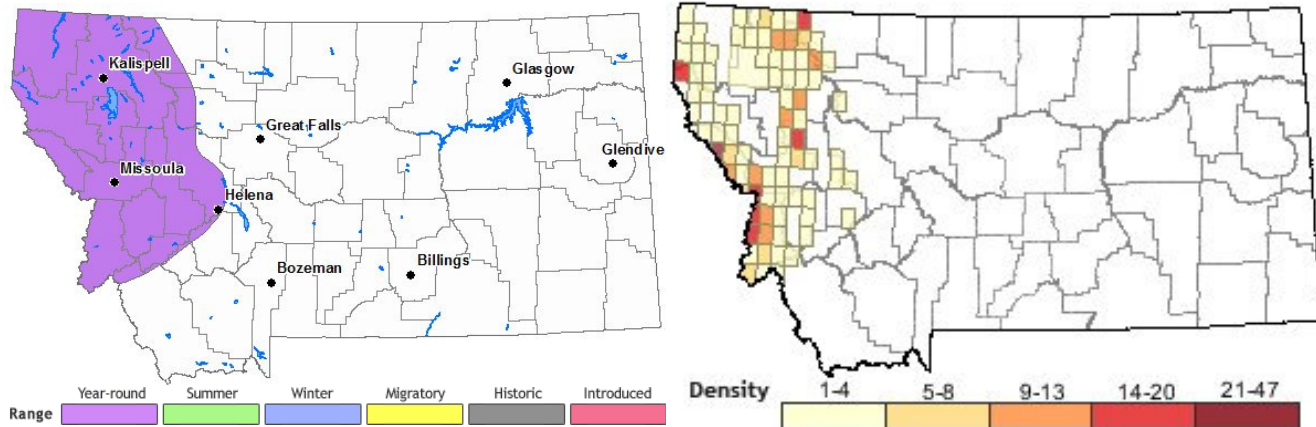


Species of Concern

Global Rank: G5
State Rank: S3

AGENCY STATUS

USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 549

General Description

The Fisher is a medium-sized mammal with a long, low stocky body. The tail is relatively long and heavily furred. They have a pronounced muzzle and large rounded ears. In winter, Fishers are dark brown to black with light colored hairs around the face and shoulders (Powell 1993). The undersides are uniformly brown, however individually unique patterns of white or cream can occur on the chest, underarms or genital region (Powell 1993). The summer pelage is more variable and lighter in color. Molt occurs once per year in late summer and early autumn (Powell 1993). The feet are large and have 5 retractable, but not sheathed, claws (Powell 1993). Fishers are highly sexually dimorphic with males averaging nearly twice the size of females. Male fishers generally weigh between 3.5 and 5.5 kilograms with females weighing between 2.0 and 2.5 kilograms (Powell 1993).

Habitat

Although they are primarily terrestrial, Fishers are well adapted for climbing. When inactive, they occupy dens in tree hollows, under logs, or in ground or rocky crevices, or they rest in branches of conifers (in the warmer months). Fishers occur primarily in dense coniferous or mixed forests, including early successional forests with dense overhead cover (Thomas et al. 1993). They commonly use hardwood stands in summer but prefer coniferous or mixed forests in winter and avoid open areas. Optimal conditions for Fishers are forest tracts of 245 acres or

more, interconnected with other large areas of suitable habitat. A dense understory of young conifers, shrubs, and herbaceous cover is important in summer.

Forest structure, which affects prey abundance and vulnerability and provides denning and resting sites for Fishers, is probably more important than tree species composition (Buskirk and Powell 1994). Forest structure can be characterized by a diversity of tree shapes and sizes, understory vegetation, snags and fallen limbs and trees, and tree limbs close to the ground (Buskirk and Powell 1994).

Young are born in a den in a tree hollow (usually), or under a log or in a rocky crevice. Large snags (greater than 20 inches diameter at breast height) are important as maternal den sites (Thomas et al. 1993).

Fringed Myotis - *Myotis thysanodes*

http://FieldGuide.mt.gov/detail_AMACC01090.aspx



Species of Concern

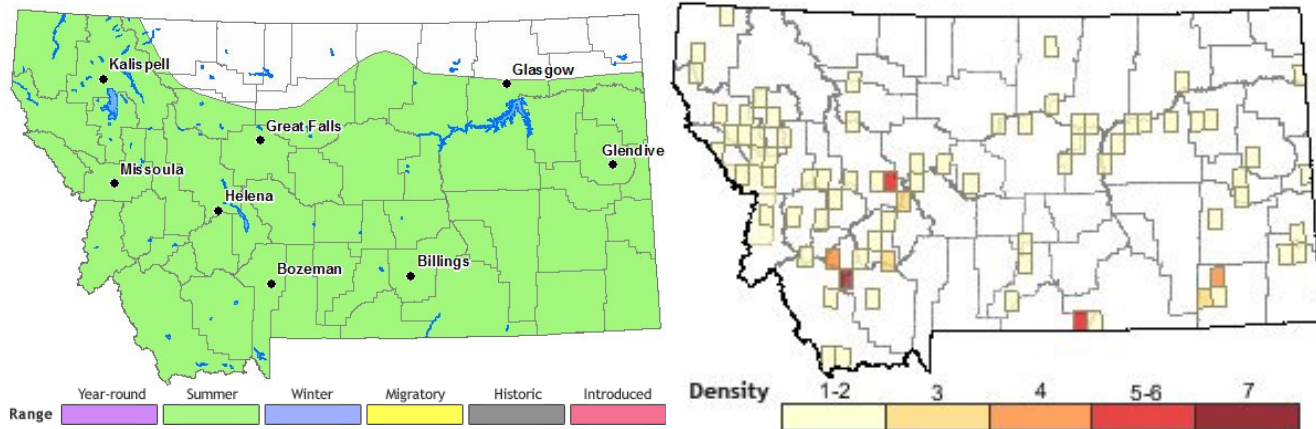
Global Rank: G4G5
State Rank: S3

AGENCY STATUS

USFWS:

USFS:

BLM: SENSITIVE



Number of Observations: 112

General Description

The Fringed Myotis is a member of the long-eared myotis group. Although similar to Western Long-eared Myotis (*Myotis evotis*), it is the only species with a well-developed fringe of hairs on the posterior margin of the uropatagium, and is larger than most other *Myotis*, except in ear size. The robust calcar is not distinctly keeled. The skull is relatively large, with a well-developed sagittal crest, and 38 teeth (dental formula: I 2/3, C 1/1, P 3/3, M 3/3). Color of the pelage varies from yellowish-brown to darker olivaceous tones; color tends to be darker in northern populations. The ears and membranes are blackish-brown and tend to contrast with the pelage. Length of the head and body is 43 to 59 millimeters, length of the tail is 34 to 45 millimeters, length of the ear is 16 to 20 millimeters, length of the forearm is 40 to 47 millimeters, and weight is 5.4 to 10.0 grams. Females are significantly larger in head, body and forearm size (O'Farrell and Studier 1980, Nagorsen and Brigham 1993, Foresman 2001).

Habitat

The few Montana records indicate that the habitats in Montana that are used by the Fringed Myotis are similar to other regions in the interior West (Foresman 2001). It has been captured in ponderosa pine and Douglas-fir forest while foraging over willow/cottonwood areas along creeks and over pools, and taken in caves (Lewis and Clark Caverns); one individual was captured in an urban setting in Missoula (Hoffmann et al. 1969, Butts 1993, Dubois 1999).

Habitat information gathered from range-wide studies state the Fringed Myotis is found primarily in desert shrublands, sagebrush-grassland, and woodland habitats (ponderosa pine forest, oak and pine habitats, Douglas-fir), although it has been recorded in spruce-fir habitat in New Mexico. It also occurs at low elevations along the Pacific Coast, and in badlands in the northern Great Plains (Jones et al. 1983, Humes et al. 1999). It roosts in caves,

mines, rock crevices, buildings, and other protected sites. Nursery colonies occur in caves, mines, and sometimes buildings (Easterla 1973, O'Farrell and Studier 1980, Jones et al. 1983). Fringed Myotis in riparian areas tend to be more active over intermittent streams with wider channels (5.5 to 10.5 meters) than ones with channels less than 2.0 meters wide (Seidman and Zabel 2001).

Golden-mantled Ground Squirrel - *Callospermophilus lateralis*

http://FieldGuide.mt.gov/detail_AMAFB05170.aspx



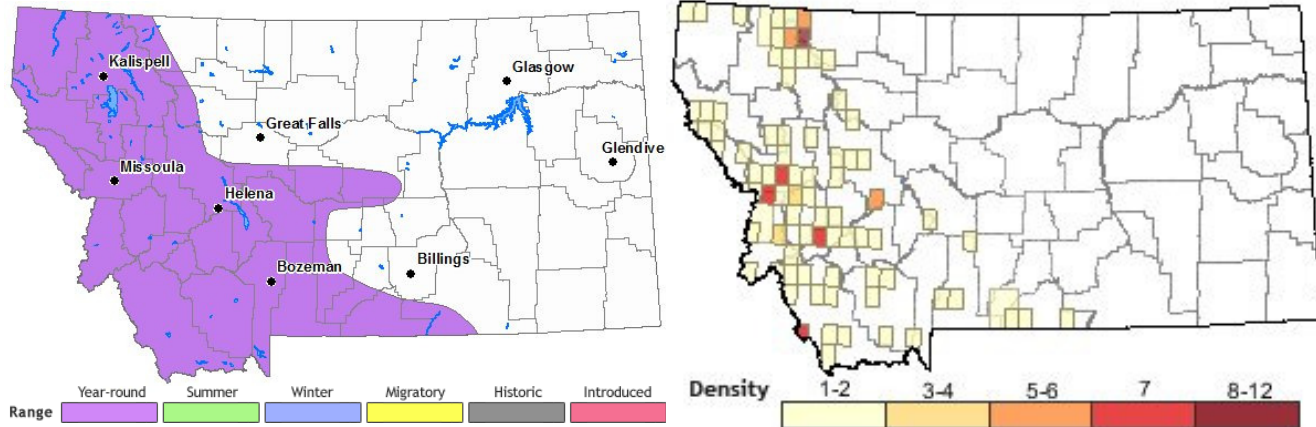
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 181

Habitat

Occurs throughout the montane and subalpine forests, wherever rocky habitat (outcrops and talus slopes) is present. It will range above timberline and even (in summer, at least) into alpine tundra (Hoffmann and Pattie 1968).

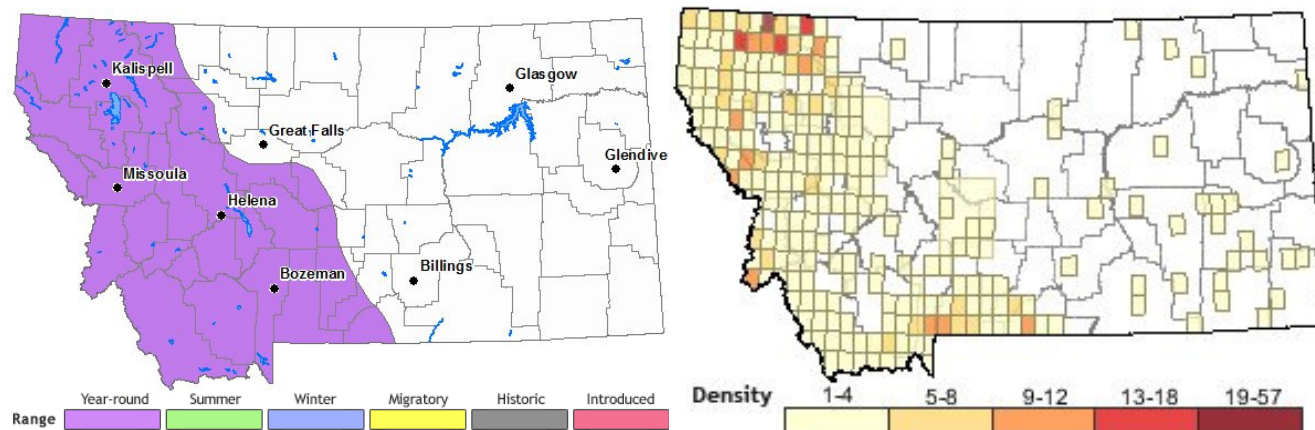
Gray Wolf - *Canis lupus*

http://FieldGuide.mt.gov/detail_AMAJA01030.aspx



Global Rank: G4
State Rank: S4

AGENCY STATUS
USFWS: DM
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 1087

General Description

The Gray Wolf is the largest of the wild dogs. Adult male Gray Wolves in Montana weigh around 47 kilograms (104 pounds) and females weigh around 36 kilograms (80 pounds). Males average approximately 186 centimeters (73 inches) in length, while 180 centimeters (70 inches) is the average for females, with the tail comprising a little less than one-third of the total length in both sexes (Foresman 2001). About half the Gray Wolves in Montana are black with the other half gray. Both color phases may be found in a pack or in a litter of pups.

Habitat

The Gray Wolf exhibits no particular habitat preference except for the presence of native ungulates within its territory on a year-round basis. In Minnesota and Wisconsin, Gray Wolves usually occur in areas with few roads and human disturbance (Thiel 1985, Mech et al. 1988, Mech 1989). Gray Wolves establishing new packs in Montana have demonstrated greater tolerance of human presence and disturbance than previously thought characteristic of this species. They have established territories where prey are more abundant at lower elevations than expected, especially in winter (Montana Fish, Wildlife and Parks 2003).

Great Basin Pocket Mouse - *Perognathus parvus*

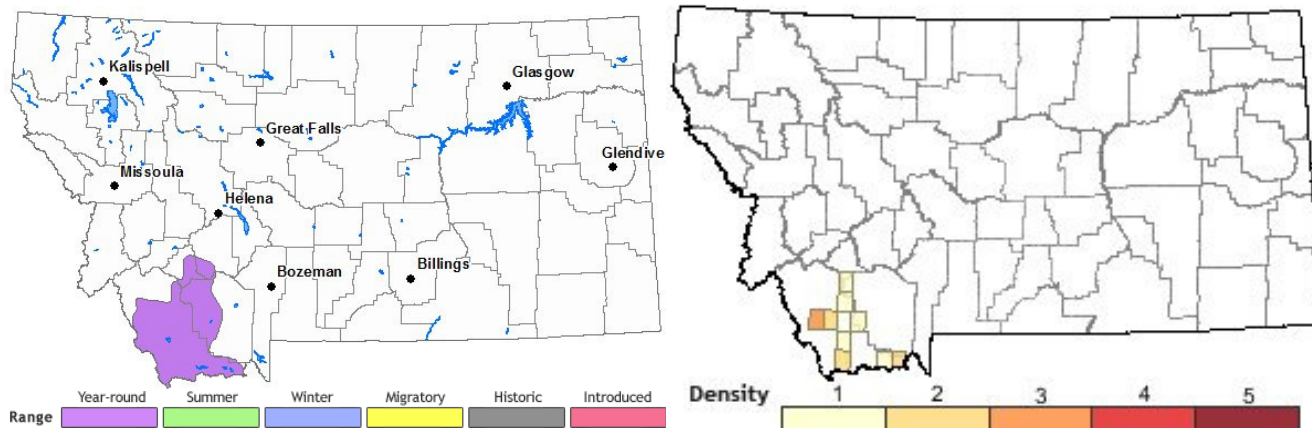
http://FieldGuide.mt.gov/detail_AMAFD01070.aspx



Species of Concern

Global Rank: G5
State Rank: S2S3

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 14

General Description

The Great Basin Pocket Mouse is the largest member of the genus *Perognathus*. Tail length is 110 to 120% of head and body length, and distinctly bicolored. The hind legs are elongate, but not to the extent observed in bipedal heteromyids such as kangaroo rats. They have external, fur-lined cheek pouches, hence the name pocket mouse. The dorsal pelage is pinkish-buff or ochereous-buff overlain with black hairs; the belly is white to buffy. Adults from Oregon attain the following body measurements: total length 138 to 205 millimeters; tail length 53 to 115 millimeters; hind foot 19 to 27 millimeters; and weight 9.5 to 29.5 grams (Verts and Carraway 1998). On the skull, the auditory bullae are not greatly inflated but meet or nearly meet anteriorly, the upper incisors are grooved, the nasal septum is perforated (connecting right and left infraorbital canals), and the molars are hypsodont (high-crowned and fully covered in enamel). There are 20 teeth in the skull (dental formula: I 1/1, C 0/0, P 1/1, M 3/3).

Habitat

Occupied habitats in Montana are arid and sometimes sparsely vegetated. They include grassland-shrubland with less than 40% cover, stabilized sandhills, and landscapes with sandy soils, more than 28% sagebrush cover, and 0.3 to 2.0 meters shrub height (Hoffmann et al. 1969, Frissell 1978, Hendricks and Roedel 2001, 2002, P. Hendricks unpublished data).

Data from other portions of its range suggest a variety of western arid and semiarid habitats are occupied, including pine woodland, juniper-sagebrush scablands, sandy short-grass steppes, and shrubland covered with sagebrush, bitterbrush, greasewood, and rabbitbrush; heavily forested habitats are avoided. They are captured more often than expected (based on availability) at sites with more than 40% ground cover. On plots where fire killed the shrub cover, the species was one-third as abundant as on adjacent unburned plots. They usually are found in habitats with

light-textured, deep soils, and sometimes in shrublands among rocks. Presence is positively correlated with percent sand and negatively with percent clay. Adults sleep and rear young in underground burrows (Verts and Kirkland 1988, Verts and Carraway 1998).

Grizzly Bear - *Ursus arctos*

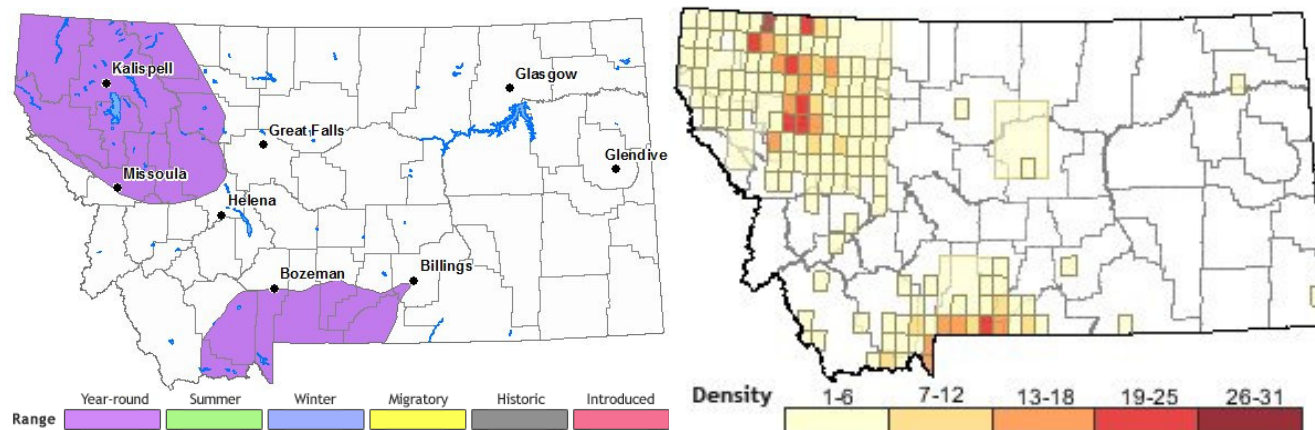
http://FieldGuide.mt.gov/detail_AMAJB01020.aspx



Species of Concern

Global Rank: G4
State Rank: S2S3

AGENCY STATUS
USFWS: LT,XN
USFS: THREATENED
BLM: SENSITIVE



Number of Observations: 1135

General Description

Grizzly Bears have a massive head with a prominent nose, rounded inconspicuous ears, small eyes, short tail and a large, powerful body (Pasitschnaik-Arts 1993). The facial profile is concave and there is a noticeable hump above the shoulders. The claws on the front feet of adults are about 4 inches long and slightly curved. Grizzly Bears range widely in color and size. The most prevalent coloration of Grizzly Bears in Montana is medium to dark brown underfur, brown legs, hump and underparts, with light to medium grizzling on the head and back and a light patch behind the front legs. Other forms, lighter or darker with varying levels of grizzled hair patches, occur in lesser numbers. Although extremely variable depending on the season, adults are around 185 centimeters long (Foresman 2001) and weigh around 200 kilograms in males and 130 kilograms in females (Kasworm and Manley 1988).

Habitat

In Montana, Grizzly Bears primarily use meadows, seeps, riparian zones, mixed shrub fields, closed timber, open timber, sidehill parks, snow chutes, and alpine slabrock habitats. Habitat use is highly variable between areas, seasons, local populations, and individuals (Servheen 1983, Craighead 1982, Aune 1984). Historically, the Grizzly Bear was primarily a plains species occurring in higher densities throughout most of eastern Montana.

Hayden's Shrew - *Sorex haydeni*

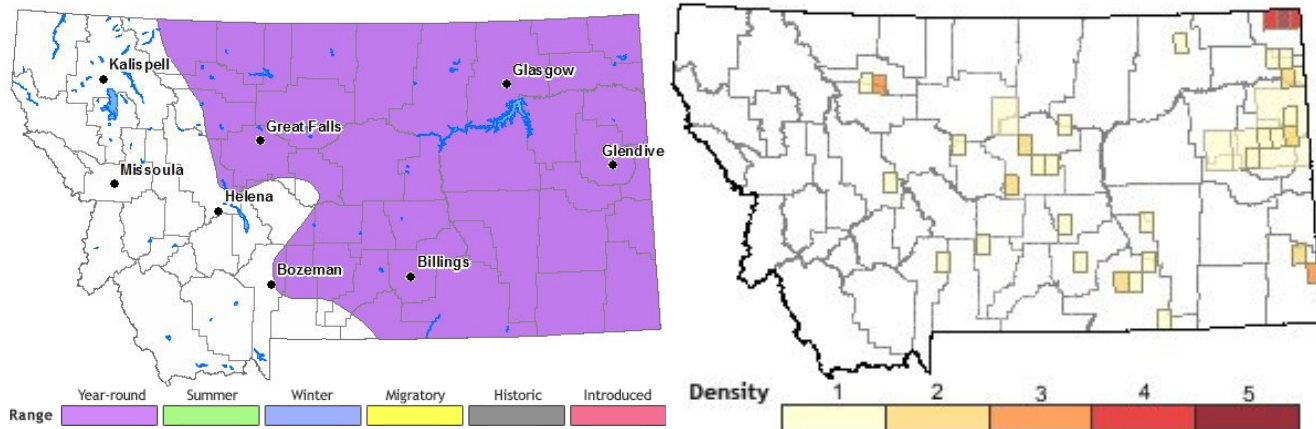
http://FieldGuide.mt.gov/detail_AMABA01280.aspx



Potential Species of Concern

Global Rank: G4
State Rank: S3S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 57

Habitat

More partial to grassy habitats than is *S. cinereus*, which prefers forest and woodland. Partial to moist habitats. Young probably born in spherical nests 4 to 5 in. diameter, constructed of grass.

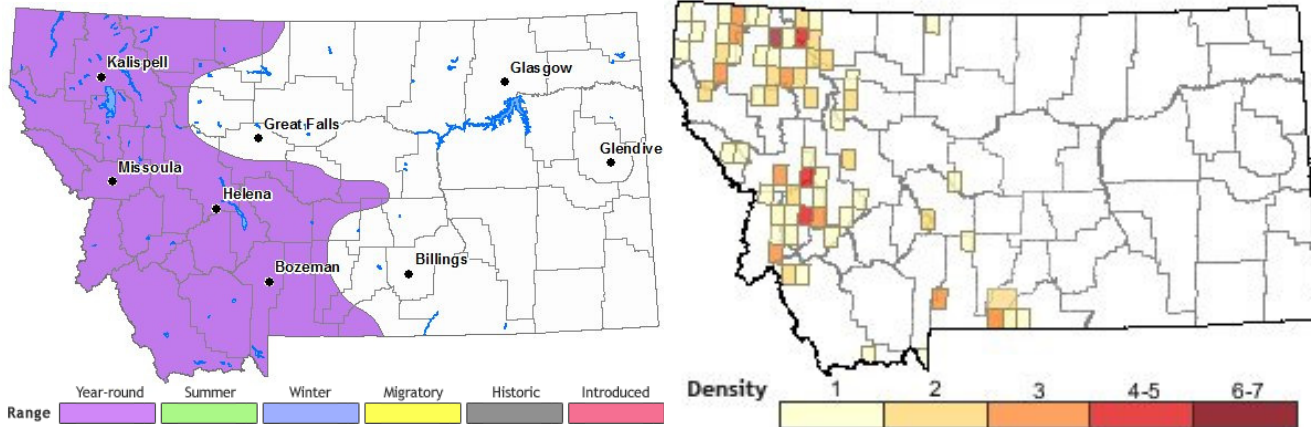
Heather Vole - *Phenacomys intermedius*

http://FieldGuide.mt.gov/detail_AMAFF10010.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 116

General Description

The adult Heather Vole is 4 1/2 to 6 inches long, weighing a little over an ounce. It is gray with a brown to dark-brown cast to the fur, white face, and silvery belly.

Habitat

Most common in subalpine spruce/fir forest with evergreen shrub ground cover, also in timberline krummholz, alpine tundra. Sometimes in montane yellowpine/Douglas-fir forests with bearberry/twinflower understory (Hoffmann and Pattie 1968).

Hispid Pocket Mouse - *Chaetodipus hispidus*

http://FieldGuide.mt.gov/detail_AMAFD05050.aspx



Species of Concern

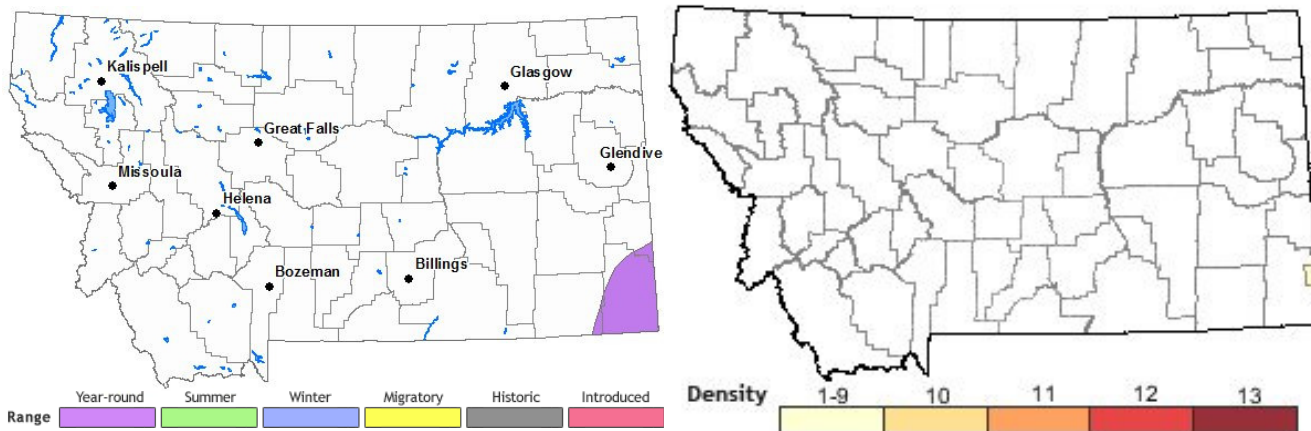
Global Rank: G5
State Rank: S1S3

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 9

General Description

The pelage of the Hispid Pocket Mouse is harsh, with a rump patch of noticeable spiny bristles. It is ochraceous-buff above and mixed with blackish hairs, the belly is white, and separated from the back by a distinctive lateral stripe of buffy hairs. The tail is sharply bicolored, dark to blackish above and white below, and is equal to or shorter than the length of the head and body. It has fur-lined cheek pouches, as in other pocket mice, but the hind feet are naked. Adults from Nebraska attain the following body measurements: total length 203 to 237 millimeters; tail length 93 to 114 millimeters; hind foot length 23.5 to 29.5 millimeters; and mean weight 32.0 grams (Paulson 1988).

Respective measurements for the lone specimen from Montana are total length 191 millimeters, tail length 94 millimeters, hind foot length 28 millimeters, and weight 33.2 grams (Pefaur and Hoffmann 1971).

Habitat

The only Montana record for Hispid Pocket Mouse occurred on a north-facing slope that supported grassland dominated by *Stipa comata*, *Carex filifolia*, *Andropogon scoparium*, *Agropyron smithii*, *Aristada longiseta*, and *Bouteloua gracilis* (Pefaur and Hoffmann 1971). Information from other parts of its range suggests that the Hispid Pocket Mouse prefers prairie areas with sparse or moderate vegetation, and has been found in a variety of dry grassland and shrub-grassland habitats. It also occurs in rocky or gravelly areas with heavy soils, not being restricted to sandy soils as are other prairie pocket mice. It has also been found in irrigated cornfields and hayfields. Sleeping and birthing occur in underground burrows (Paulson 1988, Seabloom 2002).

Hoary Bat - *Lasiurus cinereus*

http://FieldGuide.mt.gov/detail_AMACC05030.aspx



Species of Concern

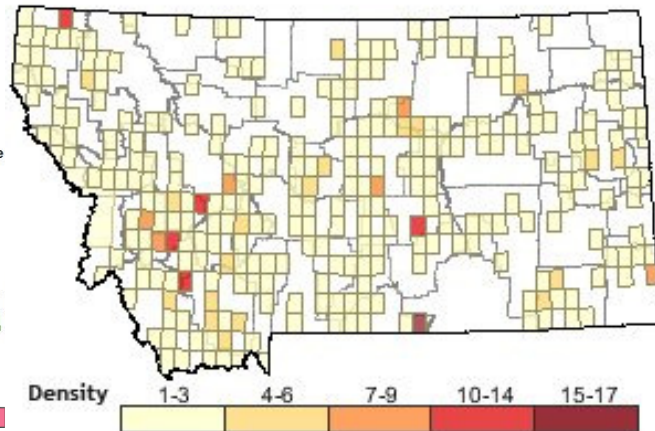
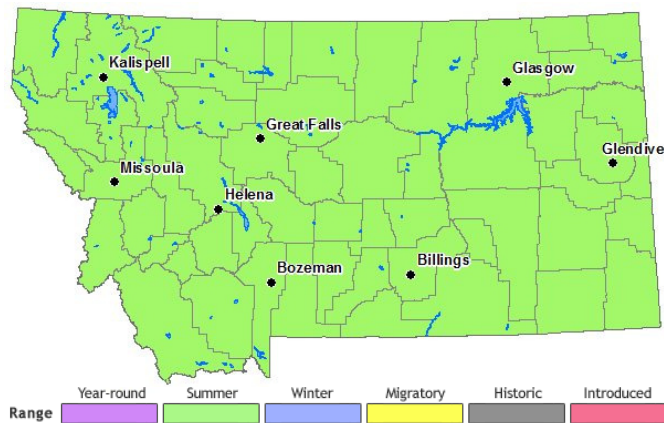
Global Rank: G5
State Rank: S3

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 810

General Description

The Hoary Bat is a large lasurine (20 to 35 g) with long pointed wings and heavily-furred interfemoral membrane. Pelage overall is frosted or hoary (mixed brownish and grayish with white-tipped hairs, wrist and shoulder patches whitish), yellowish on the throat, forearm length about 46 to 55 mm. Ears are short and rounded, rimmed in dark brown or black, tragus short and broad. It has large teeth; dental formula I 1/3, C 1/1, P 2/2, M 3/3 (Shump and Shump 1982b, Adams 2003).

Habitat

During the summer, Hoary Bats occupy forested areas. A female with two naked pups was found in mid-July using a wooden bridge in Stillwater County as a temporary day roost (Hendricks et al. 2005, but no other Montana roosts reported). Often captured foraging over water sources embedded within forested terrain, both conifer and hardwood, as well as along riparian corridors. Reported in Montana over a broad elevation range (579 to 2774 m; 1900 to 9100 ft) during August, the highest record from treeline along the Gravelly Range road (Madison County), the lowest from the Yellowstone River near Sidney (Richland County); probably most common throughout summer in Montana at lower elevations.

Hoary Marmot - *Marmota caligata*

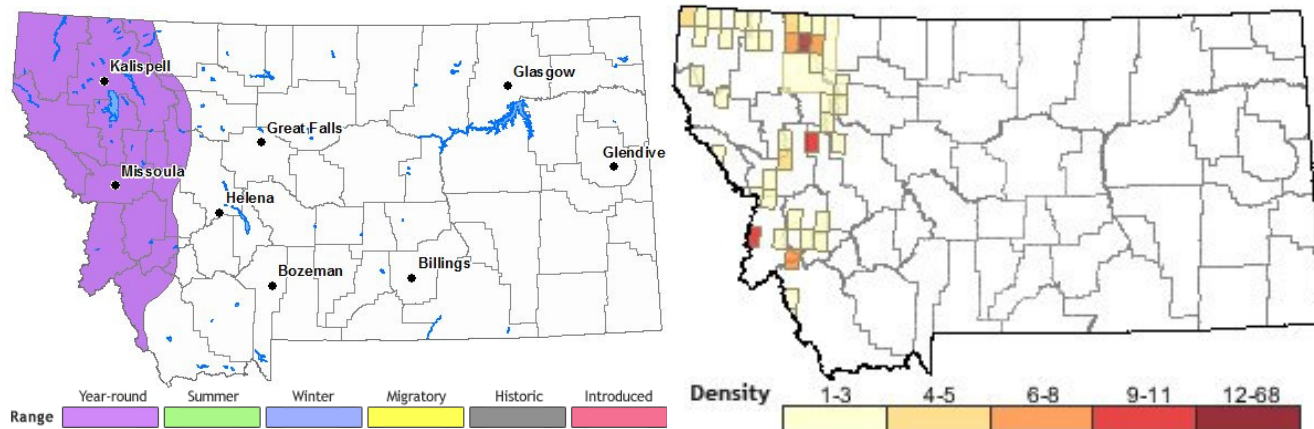
http://FieldGuide.mt.gov/detail_AMAFB03040.aspx



Potential Species of Concern

Global Rank: G5
State Rank: S3S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 194

House Mouse - *Mus musculus*

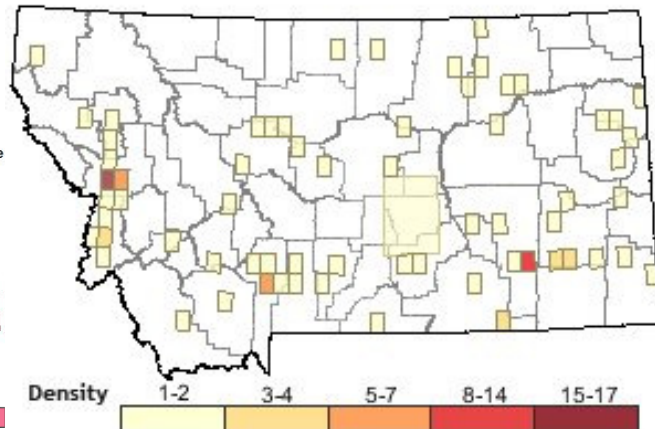
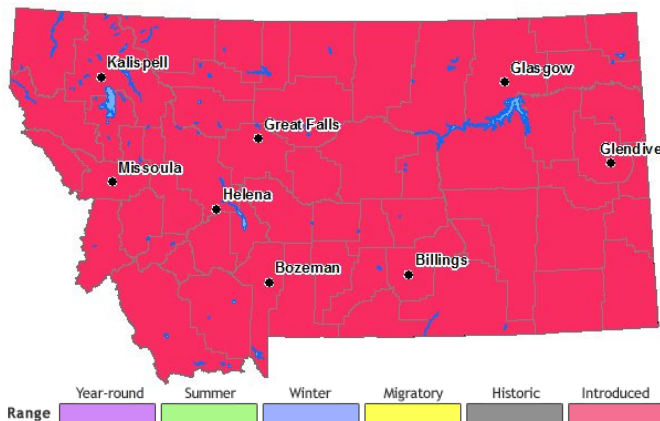
http://FieldGuide.mt.gov/detail_AMAFF22010.aspx



Exotic Species (not native to Montana)

Global Rank: G5
State Rank: SNA

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 148

General Description

The House Mouse, the most commonly found mouse near humans through history, is an average 6 1/2 inches long and 8/10 of an ounce in Montana (Foresman 2001). The large ears are nearly bare. The short fur will be grayish brown above, with an underside that will be brown, gray, or even whitish, but never pure white, as in other mice of the same size (Ulrich 1986). Unlike most voles and mice, the tail is nearly uniform in color, top and bottom, and is scaly rather than haired.

Habitat

Human habitation, agricultural developments. Grassy meadows, and marsh areas (Lampe et al. 1974) along railroads and fence rows (Dood 1980). May live in feral communities (Banfield 1974).

Idaho Pocket Gopher - *Thomomys idahoensis*

http://FieldGuide.mt.gov/detail_AMAFC01070.aspx



Potential Species of Concern

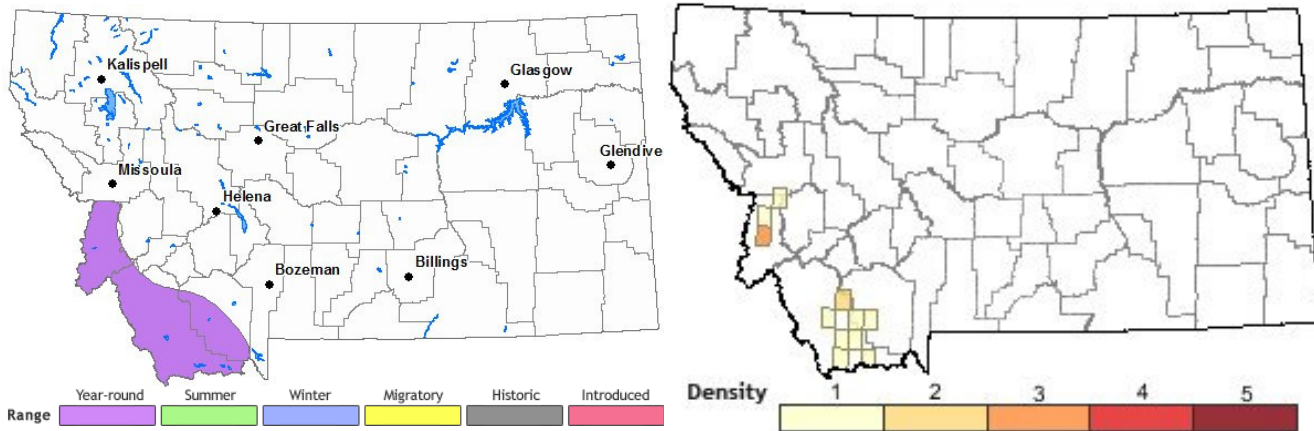
Global Rank: G4
State Rank: S2S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 14

General Description

The Idaho Pocket Gopher in Montana measures approximately 7 1/2 inches from tip of nose to end of tail. It weighs close to 3 1/2 ounces. Smaller in dimensions and lighter in color than the Northern Pocket Gopher, it shares most of the same characteristics: small ears and small black eyes, short fur, a short, nearly hairless tail (just under 1 3/4 inches in length for the Idaho Pocket Gopher), well-developed jaw, neck, forearm, and shoulder muscles, long curved claws on its forepaws, exposed yellowish incisors, and the external, furlined cheek pouches, with openings on each side of the mouth. It does not have the black patches around the almost hidden ears. Its fur will be yellowish brown on top, sprinkled with dark brown- and grayish brown-tipped hairs (Foresman 2001). Underneath, it will be yellowish or yellowish brown instead of dark gray, with whitish feet. The fur can be smoothed forward or backward and dark gray fur surrounds its nose (Zaveloff 1988). The Idaho Pocket Gopher has 20 teeth.

Least Chipmunk - *Tamias minimus*

http://FieldGuide.mt.gov/detail_AMAFB02020.aspx



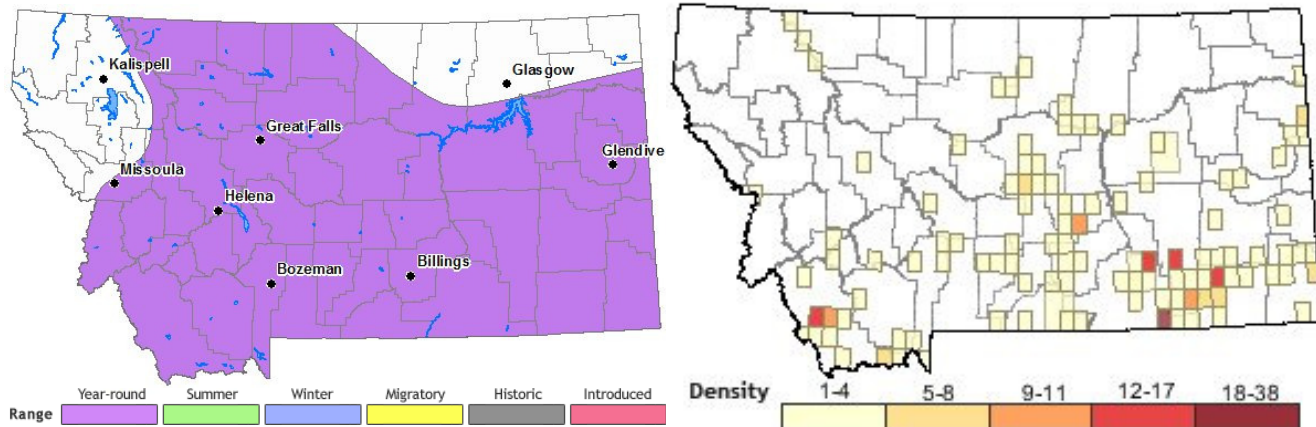
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 415

Habitat

Only chipmunk found regularly in sagebrush area of eastern and southwestern MT. Also found in brushy grasslands, coniferous forests, alpine tundra, and timberline krummholz. Habitat preference influenced by sympatric chipmunk species (Hoffmann and Pattie 1968).

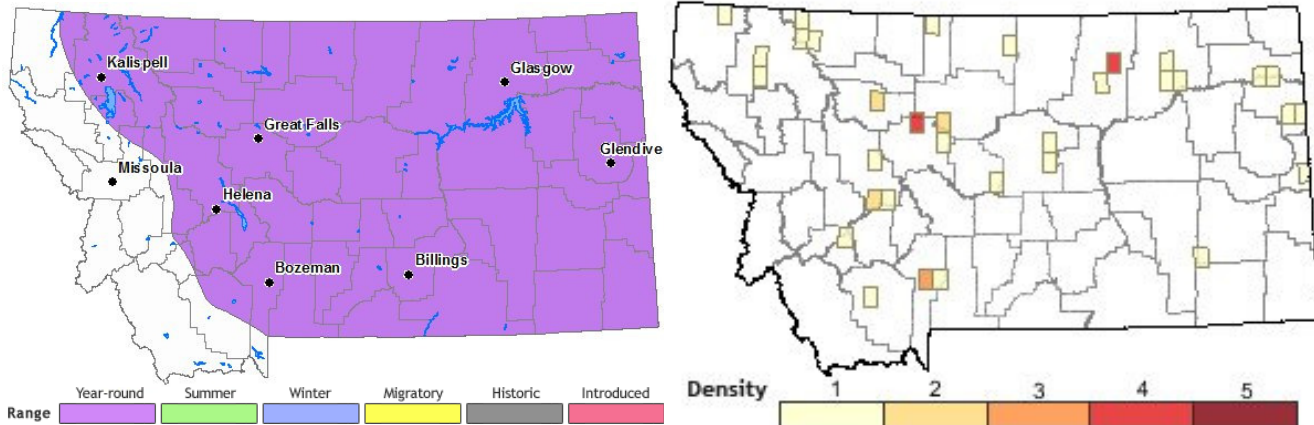
Least Weasel - *Mustela nivalis*

http://FieldGuide.mt.gov/detail_AMAJF02020.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 44

General Description

The smallest weasel and smallest carnivore in North America. Similar to other weasels in color and body form. Males are larger than females. Fur is brown above and whitish below during summer. Entirely white during winter. No black tip at end of short tail. Total length: less than 10 inches. Weight: one to three ounces.

Habitat

Variety of habitats, including meadows, fields, brushy areas, and open woods. Avoids dense forest, prefers ecotones. Abundance of small mammals is important in determining the local distribution of Least Weasels. Marshy areas, meadows, cultivated fields, brushy areas and open woods (Svendsen 1982). Nest in shallow burrow about 5 inches underground (Jones et al. 1983).

Little Brown Myotis - *Myotis lucifugus*

http://FieldGuide.mt.gov/detail_AMACC01010.aspx



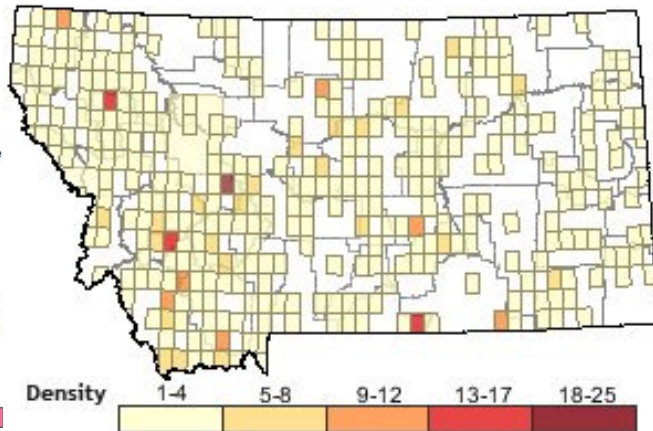
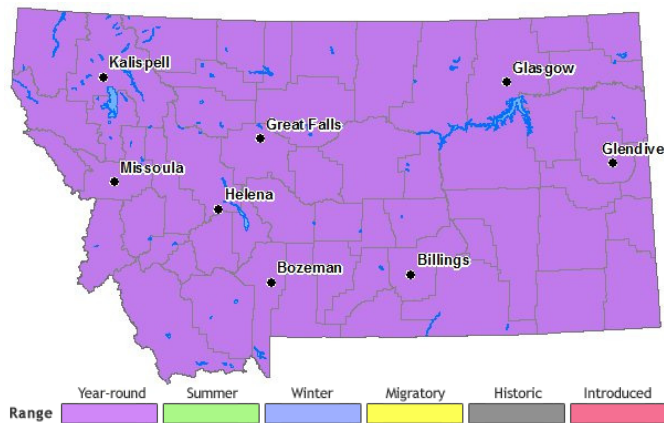
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1114

General Description

Cinnamon-buff to dark brown above, buffy to pale gray below; hairs on back have long glossy tips; ears, when laid forward, reaches approximately to the nostril; tragus about half as high as ear; calcar without keel; length of head and body 41 to 54 mm, ear 11.0 to 15.5 mm, forearm 33 to 41 mm; braincase rises gradually from rostrum; greatest length of skull 14 to 16 mm; length of upper tooththrow 5.0 to 6.6 mm (Hall 1981).

Habitat

No available information.

Long-eared Myotis - *Myotis evotis*

http://FieldGuide.mt.gov/detail_AMACC01070.aspx



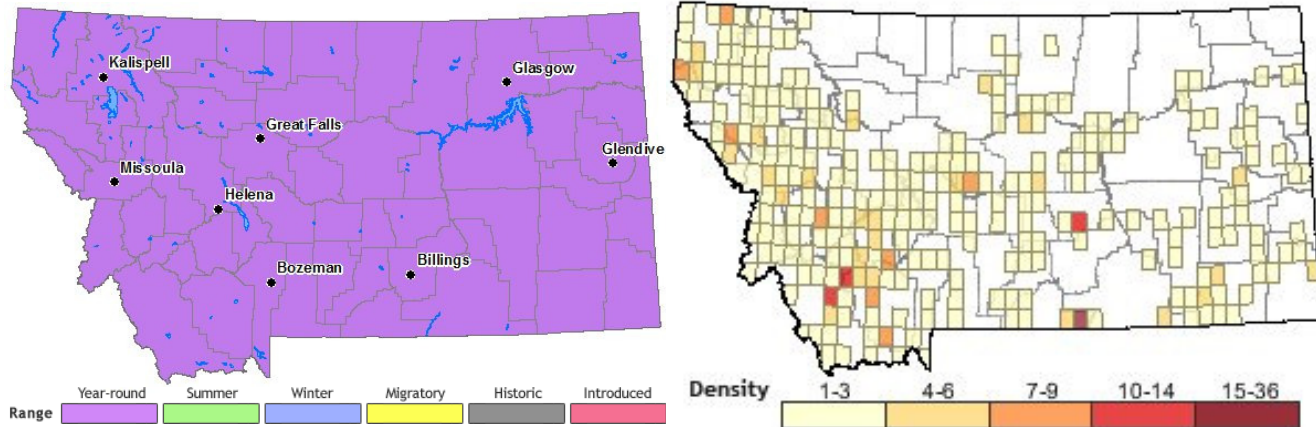
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM: SENSITIVE



Number of Observations: 777

Habitat

Myotis evotis is found in wooded and rocky areas (Jones et al. 1973). It has been located hibernating in a mine in riverbreaks habitat in northeastern Montana (Swenson and Shanks 1979).

Long-legged Myotis - *Myotis volans*

http://FieldGuide.mt.gov/detail_AMACC01110.aspx



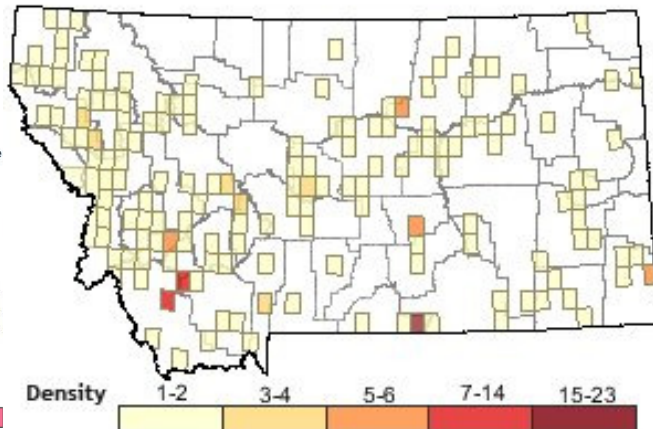
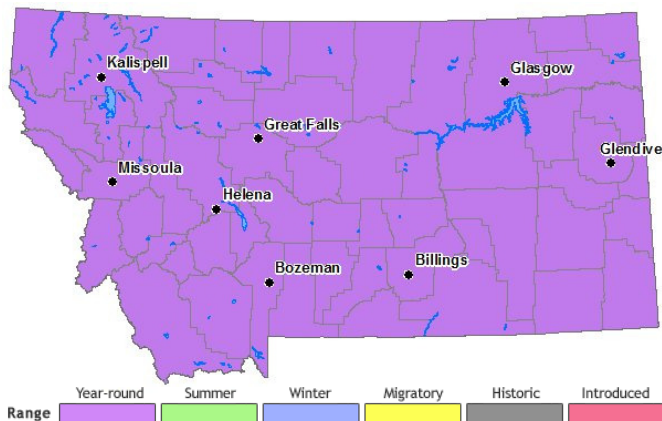
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM: SENSITIVE



Number of Observations: 310

Habitat

No available information.

Long-tailed Vole - *Microtus longicaudus*

http://FieldGuide.mt.gov/detail_AMAFF11060.aspx



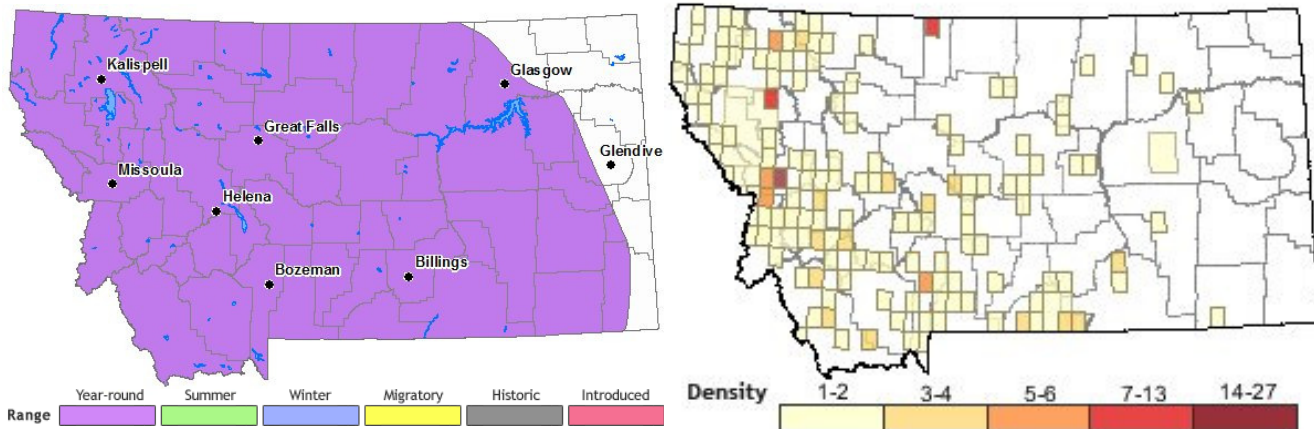
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 322

General Description

The Long-tailed Vole, as its name implies, is distinguished by the length of its bicolored tail. The adult Long-tailed Vole in Montana averages a little over 6 inches in length and an ounce in weight (Foresman 2001). Its tail will be nearly 3 inches long. Upper body color may be anywhere from a dark brown to grayish brown, with streaks of black-tipped hairs. Sides appear more gray and the belly can be gray with a dull buffy wash or whitish. The feet appear dusky or soiled white. Foresman (2001) notes the large, hairy ears and Zeveloff and Collett (1988) the long appearance of the eyes and ears in this vole.

Habitat

Riparian valley bottoms to alpine tundra, sagebrush-grassland, semi-desert to subalpine coniferous forests (Hoffmann and Pattie 1968).

Long-tailed Weasel - *Mustela frenata*

http://FieldGuide.mt.gov/detail_AMAJF02030.aspx



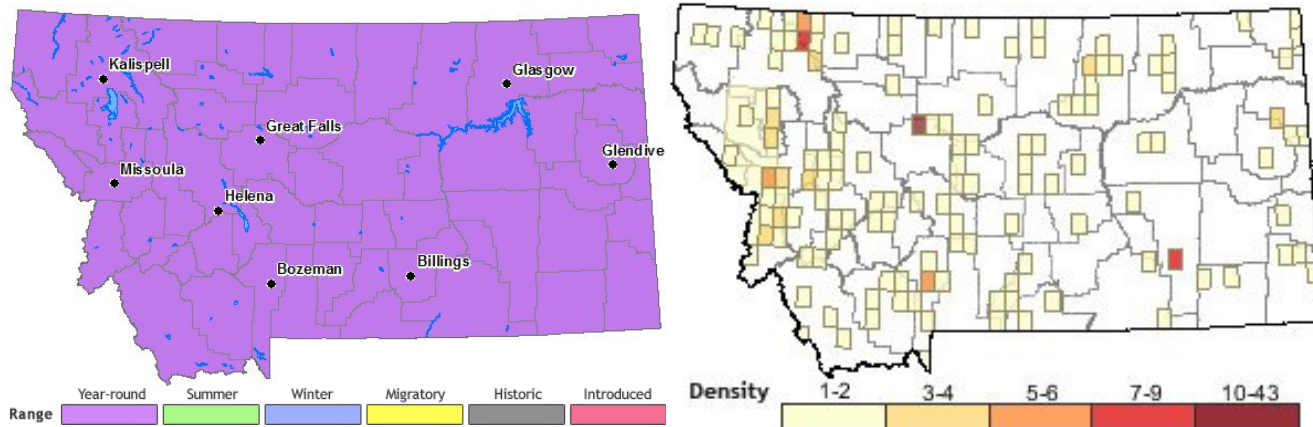
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 284

General Description

Largest and most widely distributed of the three Northern American weasels. Distinguished by its long, slender body and long neck. Longest tail of the North American weasels. During summer fur rich brown on the back and sides with yellowish-white under-parts, black tip on tail, and no whitish line down inside of leg. Acquires a white winter coat. Adult males noticeably larger than females. Total length: 11 to 16.5 inches. Weight: three to 12 ounces.

Habitat

Found in almost all land habitats near water. Has the broadest ecological and geographical range of the North American weasels. Prefers areas with abundant prey. Avoids dense forest, most abundant in late seral ecotones. Primarily nocturnal, but sometimes active during the day. Quite fearless and curious. Mainly terrestrial but can climb and swim well. Nests in old burrows of other animals. Occupies a diverse range of habitats. More prone to open country and forest openings than *M. erminea*. Common in intermontane valleys and open forests where *M. erminea* is absent. May occur up to alpine tundra (Hoffmann and Pattie 1968).

Marten - *Martes americana*

http://FieldGuide.mt.gov/detail_AMAJF01010.aspx



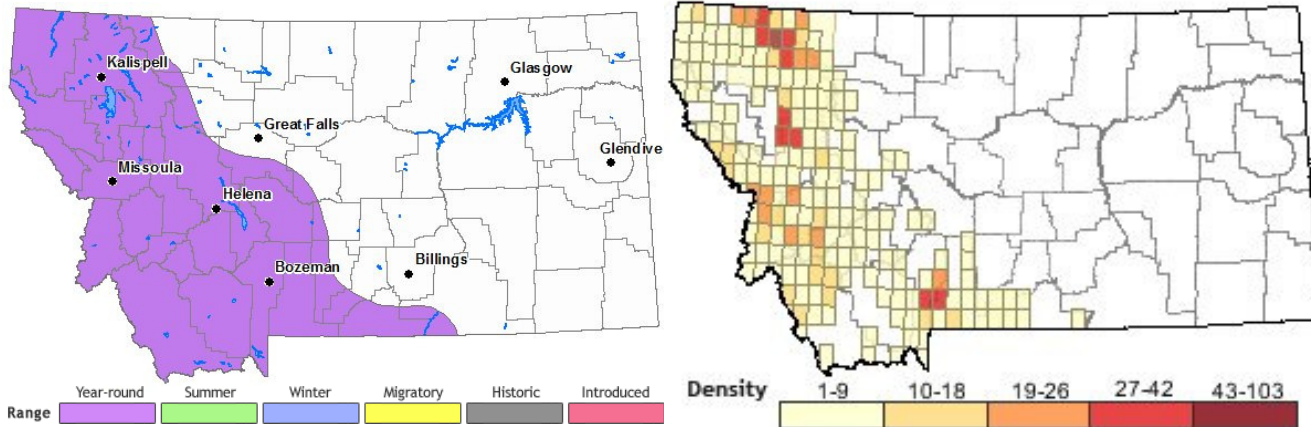
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 2231

General Description

This house cat-sized animal is distinctly weasel-like in appearance. Has short legs, prominent ears, pointed face, and a well-furred tail constituting one-third of its total length. Stiff glossy guard hairs with dense silky under-fur. The soft, dense, yellowish-brown fur shades to dark brown on its bushy tail and legs. Pale buff to orange patch on throat and breast. Has ability to rotate hind limbs to enable descending trees headfirst. Total length: 21 to 26 inches. Weight: 1.5 to 2.75 pounds.

Habitat

Primarily a boreal animal preferring mature conifer or mixed wood forests. Severe forest disturbance can significantly reduce habitat value. Uses deadfall and snags as den sites. In Glacier National Park, most often located in mesic spruce and subalpine fir types. Stands averaged 35% canopy cover. Martens often traveled along forest cover/open area ecotones. Maternity dens in rock outcrops, tree cavities (O'Neill 1980, Burnett 1981).

Masked Shrew - *Sorex cinereus*

http://FieldGuide.mt.gov/detail_AMABA01010.aspx



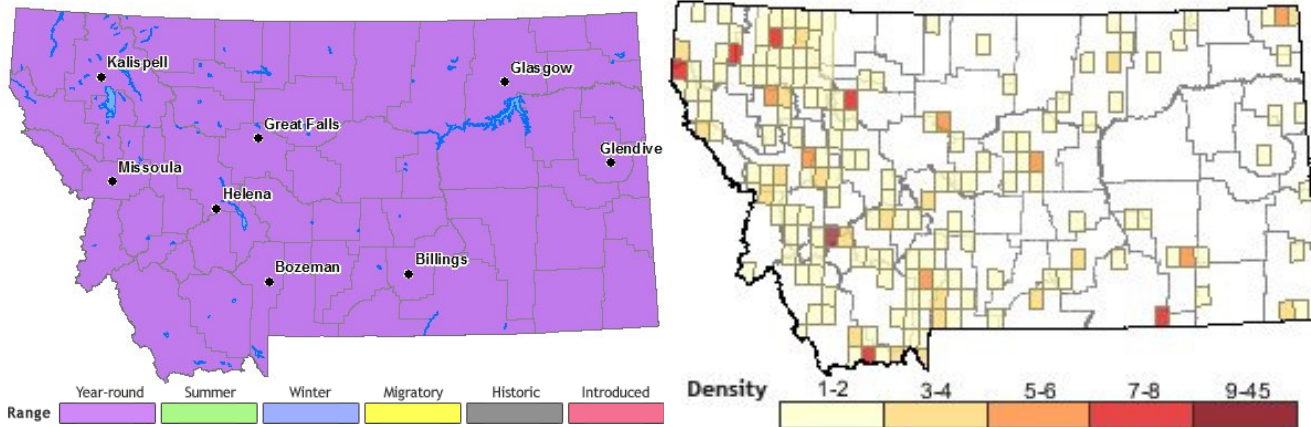
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 445

General Description

A medium-sized shrew (adults usually 9 to 11 cm total length, tail 35 to 45 mm, 3 to 6 g) with a sharply pointed snout, beady eyes, and small ears nearly hidden in the fine soft pelage; dorsal pelage varies from dark brown to gray, depending on the season and location. Five small unicuspidate teeth behind the upper incisors: the fifth is minute, the fourth generally is smaller than the third (the fourth is less commonly equal to, or sometimes larger than the third in subspecies *ohioensis*) and both of these are smaller than the first and second; tips of teeth are dark chestnut; feet are delicate, with slender weak claws; condylobasal length of skull 14.6 to 16.9 mm; maxillary breadth less than 4.6 mm; posterior border of infraorbital foramen even with, or anterior to, plane of space between M1 and M2 (Godin 1977, Hall 1981, Armstrong 1987).

Habitat

Coniferous forest (Junge and Hoffmann 1981). In western Montana, where *Sorex vagrans* also occurs, *S. cinereus* is usually restricted to drier coniferous forest habitat (Hoffmann and Pattie 1968).

Meadow Jumping Mouse - *Zapus hudsonius*

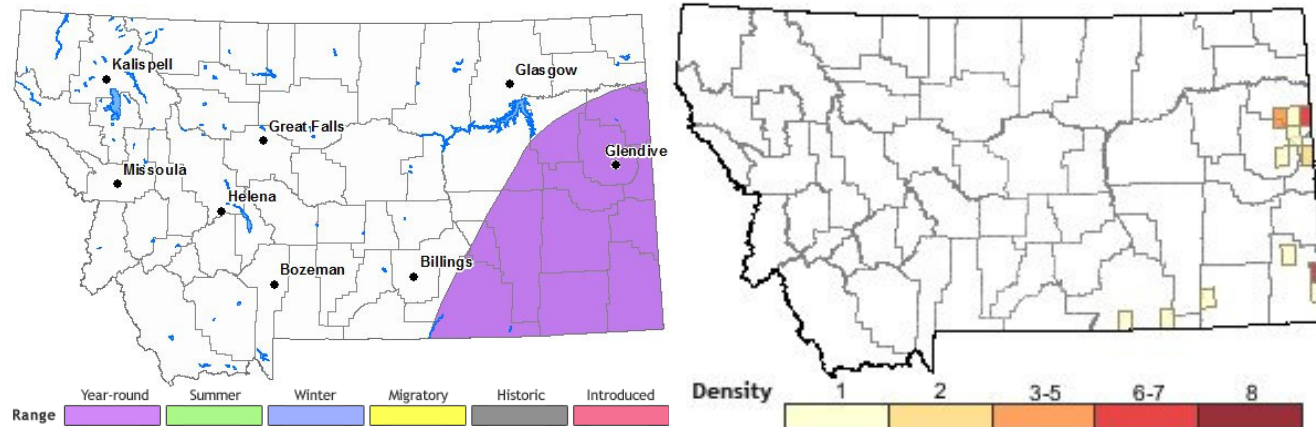
http://FieldGuide.mt.gov/detail_AMAFH01010.aspx



Species of Concern

Global Rank: G5
State Rank: S2

AGENCY STATUS
USFWS:
USFS:
BLM: SENSITIVE



Number of Observations: 30

General Description

The Meadow Jumping Mouse has coarse yellowish-brown upperparts, a broad dark dorsal stripe, a white venter, and yellowish-brown sides paler than the back. The young have softer, paler pelage. The tail is longer than the head and body, is round, sparsely haired, and bicolored (dark above, light below); the hind legs are much longer than the forelegs. The preorbital foramen of the skull is large and oval, and the nasals extend noticeably beyond the incisors. There are 18 teeth in the skull (dental formula: I 1/1, C 0/0, P 1/0, M 3/3). The upper incisors are grooved on the anterior surface, and the single upper premolar is quite small. Body measurements are: total length 187 to 255 millimeters, tail 108 to 155 millimeters, hind foot 28 to 35 millimeters, ear 11 to 16 millimeters and mass 12 to 22 grams (Whitaker 1972).

Habitat

In Montana, Meadow Jumping Mice have been found in dense, tall and lush grass and forbs in marshy areas (sometimes with standing water), riparian areas, woody draws, and grassy upland slopes, sometimes within or near forested sites of ponderosa pine (Lampe et al. 1974, Matthews 1980, Matthews and Swenson 1982).

The Meadow Jumping Mouse is generally described as a species which occupies moist lowland habitats rather than drier uplands, preferring relatively dense vegetation in open grassy and brushy areas of marshes, meadows, swamps, open conifer forest, and often favor sites bordered by small streams. On the Northern Great Plains this usually results in its restriction primarily to riparian habitats. When inactive, they occupy underground burrows, usually in banks or hills (winter), or under logs or grass clumps. Young are born in an underground nest or under other cover (Kruttsch 1954, Whitaker 1972, Jones et al. 1983).

Meadow Vole - *Microtus pennsylvanicus*

http://FieldGuide.mt.gov/detail_AMAFF11010.aspx



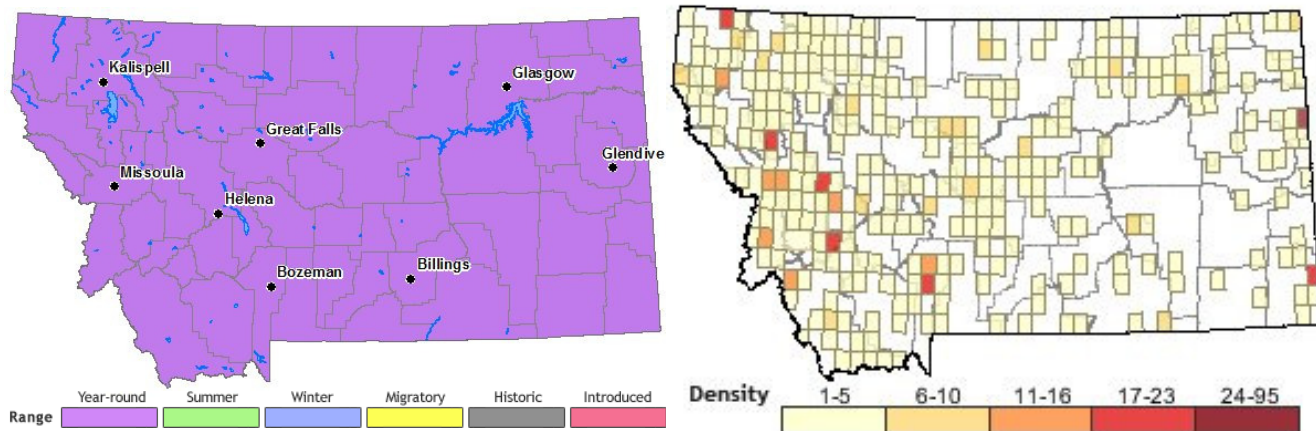
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1257

General Description

The Meadow Vole, under 6 inches in length from tip of nose to end of tail and a little over an ounce in weight, has the rotund body, blunt nose, and bright black eyes of all voles. On top it can be yellowish or reddish brown to dark brown, with black-tipped hairs. Below it is buffy to lead gray, with silver-tipped hairs. In Montana, Meadow Voles and Montane Voles look much alike; however, the Meadow Voles tend to be darker brown and have plantar tubercles (foot pads) (Foresman 2001).

Habitat

Wet grassland habitat but not above timberline in grassy alpine tundra. Where *M. montanus* not present, *M. pennsylvanicus* may inhabit drier grasslands (Hoffmann 1968).

Merriam's Shrew - *Sorex merriami*

http://FieldGuide.mt.gov/detail_AMABA01230.aspx



Species of Concern

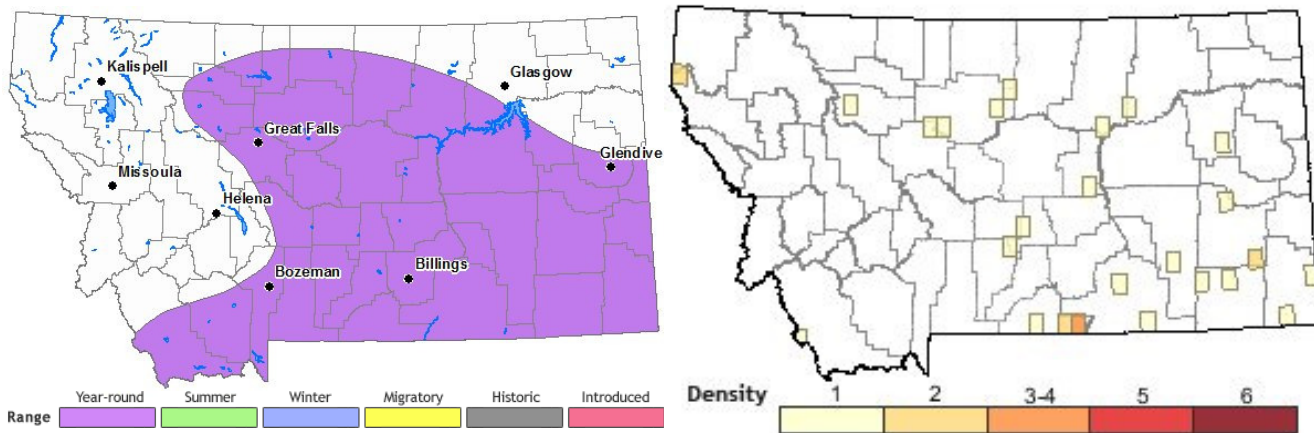
Global Rank: G5
State Rank: S3

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 31

General Description

Merriam's Shrew is a relatively small, pale shrew. The upperparts in summer are grayish drab, becoming paler on the flanks, with nearly white underparts (faintly tinged with buff). In winter the pelage is brighter, drab above, and paler below. The tail is distinctly bicolored, sparsely haired, drab above, and white below. Ranges in external measurements (in millimeters) are: total length 88 to 107, tail length 33 to 42, hind foot 11 to 13, and mass 3.3 to 6.5 grams. Condylbasal length of the skull is 15.0 to 17.1 millimeters, and maxillary breadth is 4.9 to 5.6 millimeters. The skull has 32 teeth (dental formula: I 3/1, C 1/1, P 3/1, M 3/3); the 5 upper teeth with single cusps that are posterior to the first incisor are termed the unicuspid (U), and include 2 incisors, 1 canine, and 2 premolars. The medial edge of the first incisor lacks a tine; U3 is as large or larger than U4 (Armstrong and Jones 1971, Junge and Hoffmann 1981, Verts and Carraway 1998, Foresman 2001).

Habitat

Merriam's Shrews in Montana have been captured mostly in arid sagebrush-grassland habitats (Hoffmann et al. 1969, Pefaur and Hoffmann 1971, MacCracken et al. 1985, Foresman 2001), but also in non-native grasses and forbs, such as timothy and sweet clover (Hooper 1944). It has also been taken in poorly developed riparian habitat at creekside in a shrub-steppe and grassland region (Dood 1980). Bare ground was more than 20% in a Carter County capture location (MacCracken et al. 1985); and on a north-facing grassland slope (elevation of 1040 meters) (Pefaur 1971).

Across its range, Merriam's Shrew is identified as occupying arid Upper Sonoran and Lower Transition life zones. It has been captured in sagebrush-steppe, pine woodland, mountain mahogany, open ponderosa pine stands, spruce-aspen stands, forb-dominated mine-reclamation land, bunchgrass grassland, and dunes (Hudson and Bacon 1956, Brown 1967, Allred 1973, George 1990, Kirkland et al. 1997, Verts and Carraway 1998, Benedict et al. 1999, Nagorsen et al. 2001, Hafner and Stahlecker 2002). Merriam's Shrew seems to prefer drier habitats than do other shrews, and may also utilize burrows and runways of various microtines and other mice (Armstrong and Jones 1971). Shrub cover in British Columbia was as low as 5% (Nagorsen et al. 2001), and ranged from 28 to 71% in Idaho (Allred 1973), sometimes with 30% juniper cover.

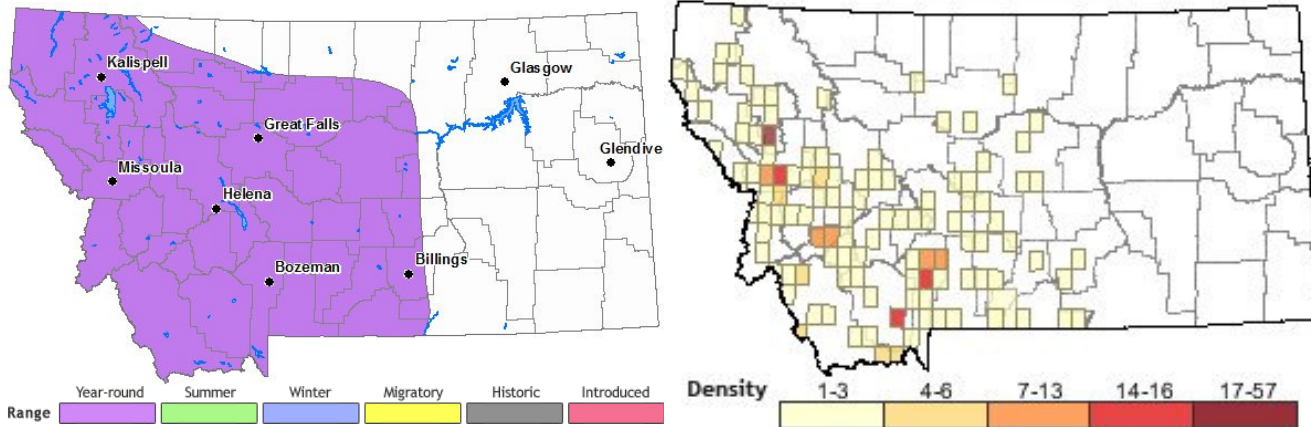
Montane Vole - *Microtus montanus*

http://FieldGuide.mt.gov/detail_AMAFF11020.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 425

General Description

The adult Montane Vole can measure from 5 1/2 to 7 1/2 inches long, from tip of nose to end of tail. Its back will be blackish brown or black, with a gray cast to the fur. Pale, buffy sides, a whitish belly and dusky-colored feet help it blend into dry grasslands. This rodent's ears are small enough to be hidden in its fur (Foresman 2001).

Habitat

Usually dry grassland or sagebrush-grasslands. Will use wet meadows and marshes at high elevations when *M. pennsylvanicus* is absent (Hoffmann 1969, Pattie 1967).

Moose - *Alces americanus*

http://FieldGuide.mt.gov/detail_AMALC03010.aspx



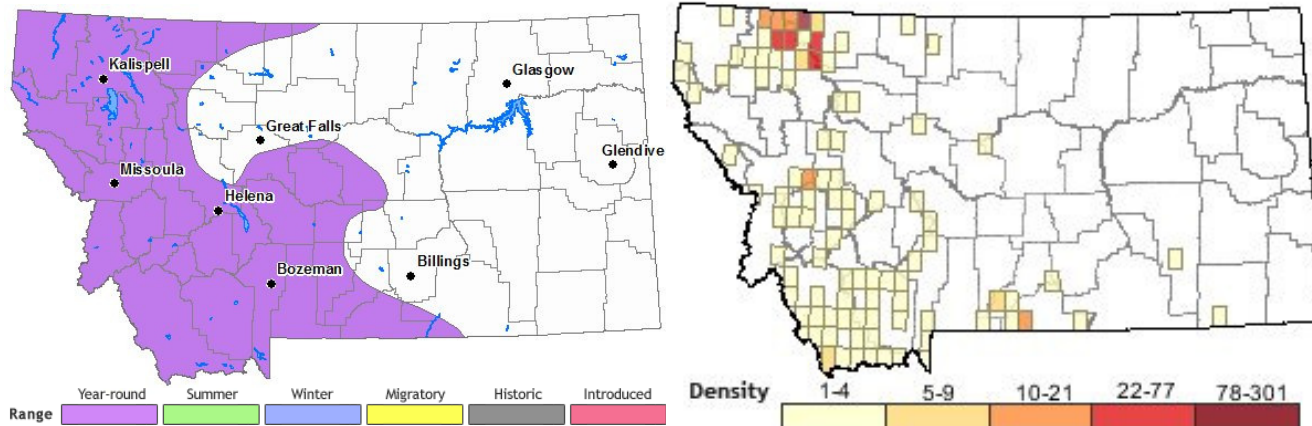
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1063

General Description

Coat dark brown to black; large overhanging snout; pendant "bell" under throat; antlers massive and flat; tail short; bulls (largest antlered animals in the world) weigh 800 to 1,200 lbs. cows 600 to 800 lbs. Usually solitary but may congregate during rut or on excellent winter range; at home in water, may submerge for 3 to 4 minutes, or swim for miles; cows very protective of calves.

Habitat

Variable. In summer, mountain meadows, river valleys, swampy areas, clearcuts. In winter, willow flats or mature coniferous forests. Best ability of any Montana ungulate to negotiate deep snow. Coniferous cover, uneven plant age composition and willows important components. Some Moose may be yearlong willow flat residents (Stone 1971). Closed canopy stands may be important in late winter (Mattson 1985).

Mountain Cottontail - *Sylvilagus nuttallii*

http://FieldGuide.mt.gov/detail_AMAEB01060.aspx



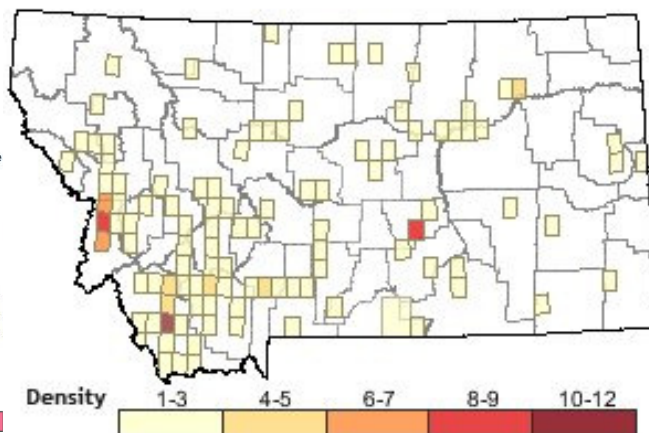
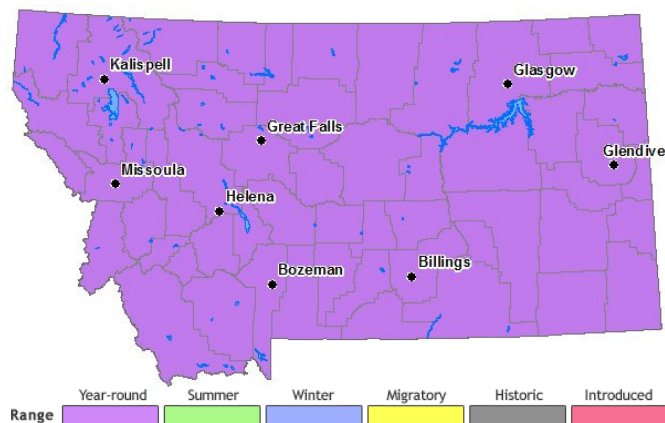
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 223

Habitat

Primarily dense shrubby undergrowth, riparian areas in Central and Eastern MT. In mountains, it uses shrub-filled gullies and forest edges (Hoffmann and Pattie 1968).

Mountain Goat - *Oreamnos americanus*

http://FieldGuide.mt.gov/detail_AMALE02010.aspx



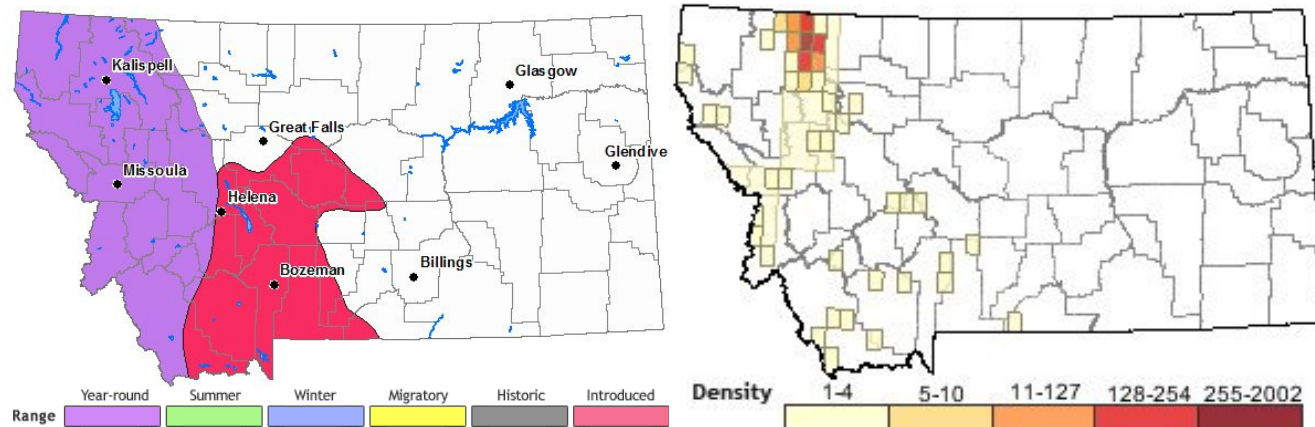
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 4947

General Description

Coat white; horns and hooves black; tail may have a few brown or black hairs. Long hair of winter coat forms a beard under the chin and pantaloons around the front legs. Body compact and chunky, legs short. Horns smooth, sharp, and curved slightly backward, 8 to 10 inches long. Horns of nannies curve less and are thinner, but sometimes longer, than those of billies. Hooves have hard outer edges with soft centers that "stick" to rocks. Old billies may weigh 300 lbs. or more, nannies about 150 lbs. Nannies, kids and immature billies form small herds; mature billies often alone except during rut; females dominant over males.

Habitat

Precipitous terrain; steep, south-facing slopes in winter, sometimes enter subalpine forest. Snow cover an important influence on winter distribution. Winter habitat: cliffy terrain, south-facing canyon walls, windblown ridgetops. Spring: south- and west-facing cliffs. Summer: meadows, cliffs, ravines, and forests (Chadwick 1973, Burleigh 1978, Joslin 1985).

Mountain Lion - *Puma concolor*

http://FieldGuide.mt.gov/detail_AMAJH04010.aspx



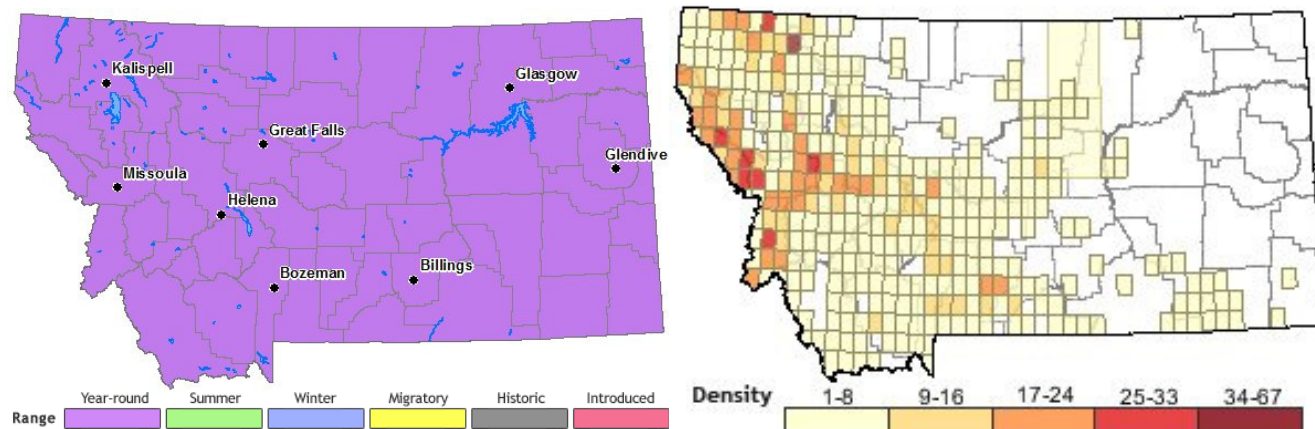
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 3373

General Description

A large cat with an elongate body, powerful limbs, small head, short face, short rounded ears, long neck and long, round, black-tipped tail. Two color phases: buff, cinnamon, and tawny to cinnamon rufous and ferruginous, and silvery gray to bluish and slaty gray; young are buffy with dark spots, and the eyes are blue for the first few months; color of upperparts is most intense mid dorsally; sides of muzzle and backs of ears are black; underparts are dull whitish with buff wash across the belly; end of tail is dark brown or blackish; adult total length 171 to 274 cm in males, 150 to 233 cm in females; adult tail length 53 to 81 cm; greatest length of skull 172 to 237 mm in males, 158 to 203 mm in females (Nowak 1991, Hall 1981, Maehr 1992). Eyes set forward on head for sight hunting. Adult males weigh 150 to 190 lbs., females 70 to 120 lbs. Solitary, except for females accompanied by males or kittens. Females den in caves, rock crevices, brush piles, etc. with kittens and leave them there while hunting; usually hunt by stealth at night and cover unused food for later use. Males territorial, and large male home ranges may overlap smaller ones of females.

Habitat

Mostly mountains and foothills, but any habitat with sufficient food, cover and room to avoid humans. In western MT, spring and fall ranges at higher elevation than winter areas. Cover types in winter: 42% pole stands, 30% selectively logged (pole or mature), 18% seral brushfields (Murphy 1983). In eastern MT apparently uses riparian and breaks (Matthews and Swenson 1982).

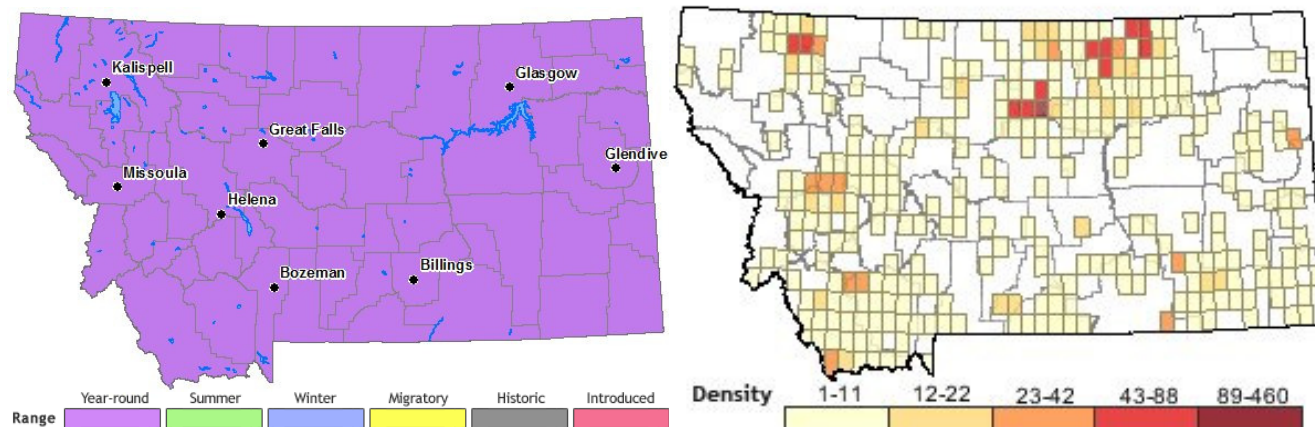
Mule Deer - *Odocoileus hemionus*

http://FieldGuide.mt.gov/detail_AMALC02010.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 4337

General Description

Coat gray in winter, brownish in summer; forehead and brisket dark; chin, throat, and rump patch white. Tail short and round with black tip. Ears large (reason for name). Antlers fork and fork again; typical adult buck has four tines on each side (or five if brow tines are present); forward-tipping brow tines are shorter than those of White-tailed Deer or may be absent. Outside of hind foot has a slit-like scent gland up to seven inches long. Mature bucks weigh 250 to 275 lbs. on good range, does 160 to 180. More gregarious and migratory (mostly elevational movements) than White-tailed Deer. Feed early and late in the day. Run with tail down in bounding leaps, keeping all feet together.

Habitat

Grasslands interspersed with brushy coulees or breaks; riparian habitat along prairie rivers; open to dense montane and subalpine coniferous forests, aspen groves. Varies between areas and seasons. In prairie, uses breaks, badlands and brushy draws. In mountain foothills, Mule Deer are widely distributed in summer in forest and subalpine. In winter use lower elevation open shrub dominated slopes (Pac 1976, Mackie et al. 1982).

Muskrat - *Ondatra zibethicus*

http://FieldGuide.mt.gov/detail_AMAFF15010.aspx



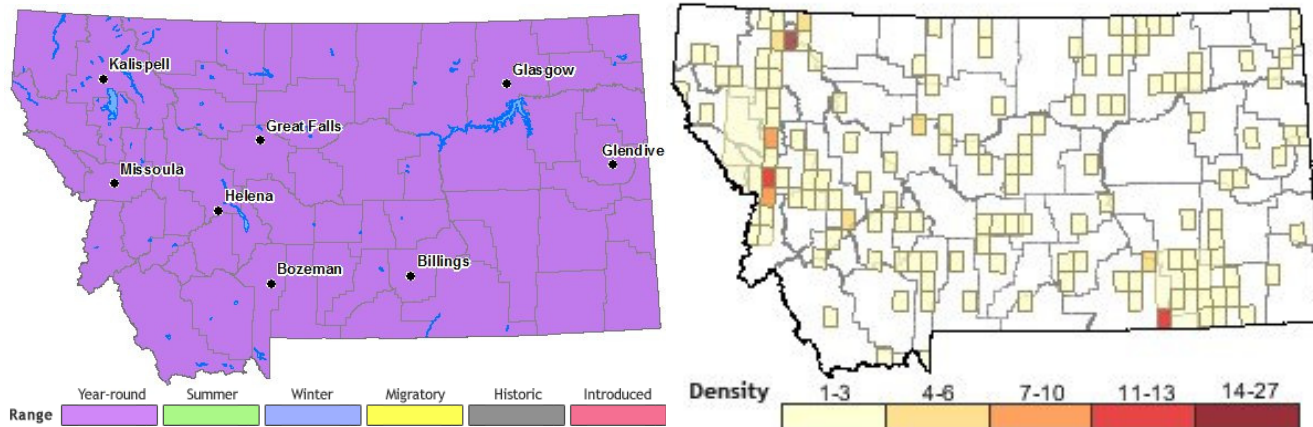
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 296

General Description

Muskrats are large voles adapted to aquatic conditions. The name "Muskrat" is related to odoriferous secretions from the perineal glands. The long naked tail flattened laterally distinguishes Muskrats from other mammals. Webbed hind feet. Fur is dense and rich brown with a coarse guard hair overlay and thick waterproof under-layer. Color varies from dark brown to black. Total length: 16 to 26 inches. Weight: two to four pounds. Most active at night but daytime activity is not unusual. Often builds conspicuous dome-shaped houses.

Habitat

The most widespread of North American microtine (a subfamily of mice) rodents. Marshes, edges of ponds, lakes, streams, cattails, and rushes are typical habitats. An essential habitat ingredient is water of sufficient depth or velocity to prevent freezing. The presence of herbaceous vegetation, both aquatic and terrestrial, is another essential ingredient. In general, has very flexible habitat requirements and often coexists in habitats used by Beavers. Lentic or slightly lotic water containing vegetation. *Typha* spp. (cattails) and *Scirpus* spp. (bulrushes) usually present. Constructs bank dens, lodges, feeding huts, platforms, pushups and canals (Perry 1982).

Northern Bog Lemming - *Synaptomys borealis*

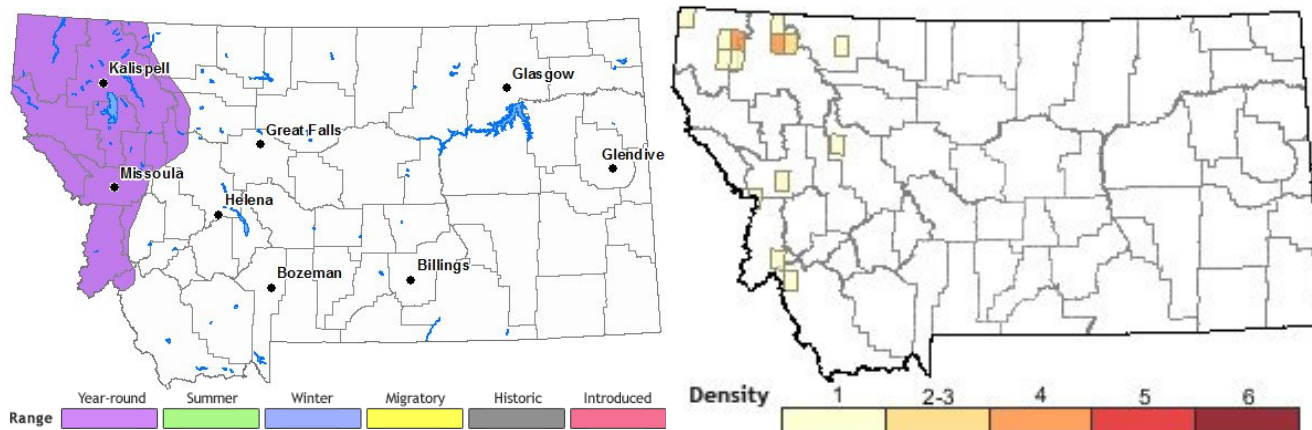
http://FieldGuide.mt.gov/detail_AMAFF17020.aspx



Species of Concern

Global Rank: G4
State Rank: S2

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM:



Number of Observations: 22

General Description

The Northern Bog Lemming has a grizzled reddish-brown coat on the back that grades to gray on the belly; the coat is relatively long and loose. The ears extend noticeably beyond the body fur and are sparsely haired on the edge. The tail is extremely short. There are 16 teeth in the skull (dental formula: I 1/1, C 0/0, P 0/0, M 3/3), with the upper incisors broadly grooved. Body measurements are: total length 120 millimeters, tail 21 to 23 millimeters, hind foot 18 to 19 millimeters, and mass 22 to 25 grams (Foresman 2001a).

Habitat

Northern Bog Lemmings in Montana have been found in at least nine community types, including Engelmann spruce, subalpine fir, birch, willow, sedge (*Carex*), spike rush (*Eleocharis*), or combinations of the above, often occurring in wet meadows, fens, or bog-like environments. Wright (1950) captured lemmings in a swampy area containing spruce trees, timothy, alder and other moist-site plants (Wright 1950). The Upper Rattlesnake Creek specimen was captured in a wet-sedge/bluejoint meadow near subalpine fir (Adelman 1979). Areas with extensive moss mats, primarily sphagnum, are the most likely sites in which to find new populations (Wright 1950, Reichel and Beckstrom 1994, Reichel and Corn 1997, Pearson 1999, Foresman 2001a).

Throughout their range a variety of habitats are occupied, especially near the southern edge of the global distribution, and include sphagnum bogs, wet meadows, moist mixed and coniferous forests, montane sedge meadows, krummholz spruce-fir forest with dense herbaceous and mossy understory, alpine tundra, mossy streamsides, and even sagebrush slopes in the case of *S. b. artemisiae* in British Columbia (Clough and Albright 1987, West 1999). Typically, occupied habitat has high moisture levels. The Northern Bog Lemming occupies burrow systems up to a foot deep, and also surface runways. Young are born in nests that may be underground or on the surface in concealing vegetation.

Northern Flying Squirrel - *Glaucomys sabrinus*

http://FieldGuide.mt.gov/detail_AMAFB09020.aspx



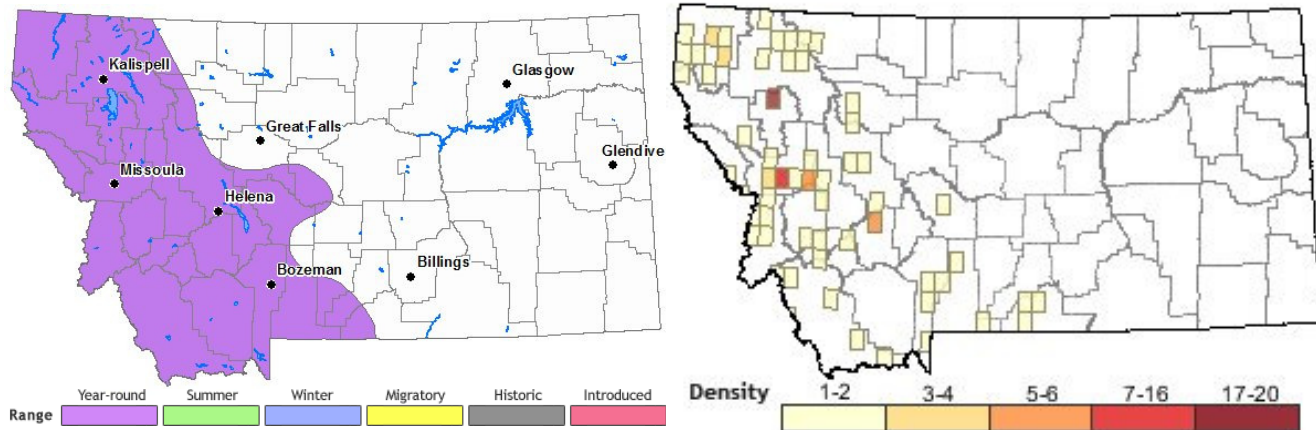
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 129

Habitat

Montane and subalpine coniferous forests. May also be found in riparian cottonwood forests (Hoffmann and Pattie 1968).

Northern Grasshopper Mouse - *Onychomys leucogaster*

http://FieldGuide.mt.gov/detail_AMAFF06010.aspx



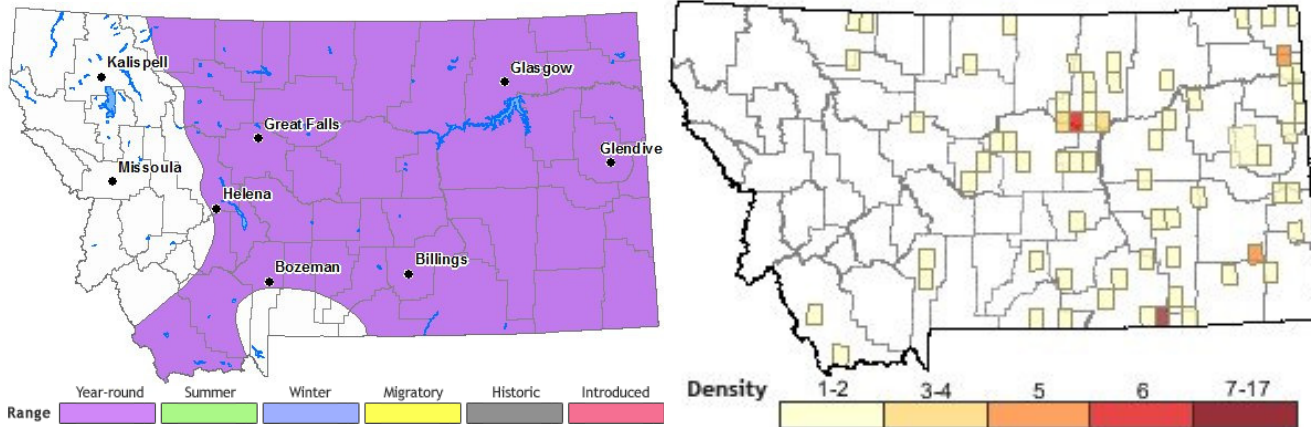
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 129

General Description

In Montana the female Northern Grasshopper Mouse averages significantly larger and heavier than the male. It will be approximately 5 3/4 inches in total length and 1 3/10 ounces in weight (Foresman 2001). The Northern Grasshopper Mouse changes upper fur color throughout its life history: grayish as a juvenile, buffy to reddish brown as an adult, and back to grayish in old age (Zeweloff 1988). It is white on the belly, legs and feet, and underside of the short, thick, blunt tail. It is a stocky but efficient miniature predator which makes a long, high-pitched call similar to a Gray Wolf or Coyote howl (Zeweloff 1988 and Kritzman 1977). Long curved claws on large front feet capture and hold insects, other rodents, birds, and reptiles. All of this mouse's feet have furry soles (Foresman 2001).

Habitat

Found in a wide variety of open habitats, grassland to sagebrush desert. Prefer sandy, silty soils. May construct its own burrows or usurp others. Three types of burrows: nest, retreat and defecation.

Northern Myotis - *Myotis septentrionalis*

http://FieldGuide.mt.gov/detail_AMACC01150.aspx

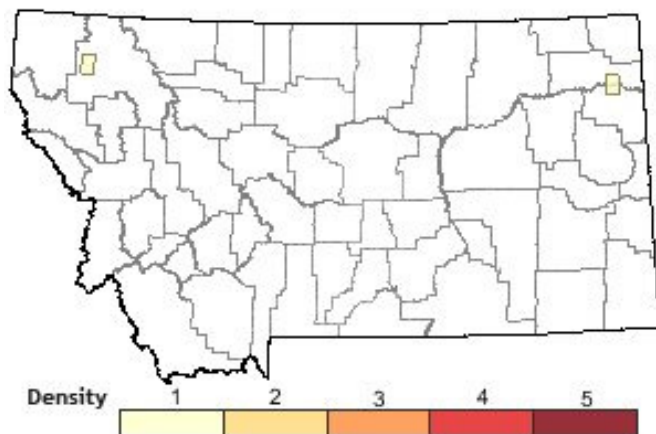


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Potential Species of Concern

Global Rank: G4
State Rank: S2S4

AGENCY STATUS
USFWS:
USFS:
BLM: SENSITIVE



Number of Observations: 2

General Description

Northern Myotis has relatively long ears (14-19 mm) extending < 5mm beyond the nose when pushed forward, a long pointed tragus, forearm length 34-38 mm, hind foot length 8-10 mm and tail length 35-42 mm; the calcar lacks a prominent keel (but a slight keel may be present), and the fringe of the tail is hairless or with only a few sparse hairs. Pelage and membranes are brown and usually the same color. Females are generally larger and heavier than males. Dental formula is I 2/3, C 1/1, P 3/3, M 3/3 (Nagorsen and Brigham 1993, Caceres and Barclay 2000, Adams 2003).

Habitat

In Montana, Northern Myotis have been located hibernating in an abandoned mine in riverbreaks habitat in Richland County (Swenson and Shanks 1979). Northern Myotis (*Myotis septentrionalis*) prefers cooler hibernacula than *Myotis lucifugus* and selects narrow crevices in which to hibernate. Summer day roosts are often in cavities or crevices behind peeling bark in trees, usually in tall, wide-diameter and partially dead hardwoods (Caceres and Barclay 2000).

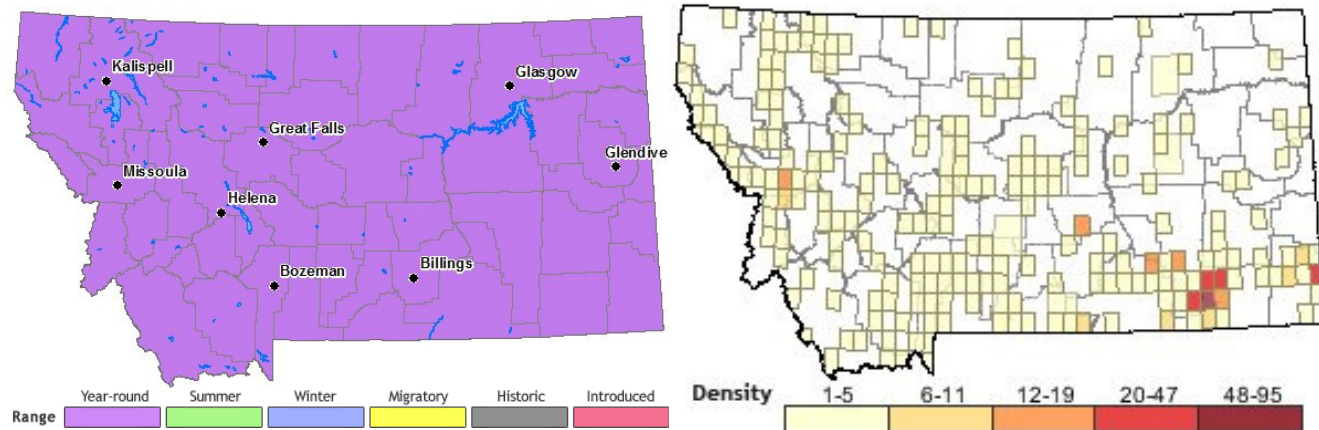
Northern Pocket Gopher - *Thomomys talpoides*

http://FieldGuide.mt.gov/detail_AMAFC01040.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 954

General Description

The Northern Pocket Gopher, so named for its large, external, fur-lined cheek pouches, measures about 8 inches length in total, with a short, nearly hairless tail of 2 1/2 inches. Its weight varies from 2 3/4 to 4 3/5 ounces (Burt and Grossenheider). It has soft reddish-brown upper fur and a dark gray underside. In the eastern areas of its distribution, the upper fur becomes lighter brown with an orangish or yellowish cast (Foresman 2001). The fur can be smoothed forward or backward (Zaveloff 1988). Black patches surround the small, nearly hidden ears. Well-developed jaw, neck, forearm, and shoulder muscles give this rodent a solid appearance, while narrow hips (Kritzman 1977) and loose skin enable it to turn 180 degrees in its tunnels (Foresman 2001). It is equipped with long curved claws on three digits of its forepaws (Foresman 2001) and sharply curved, always exposed, yellowish incisors for digging and cutting. The feet are whitish and the incisors may be white-tipped. There may also be white markings under the chin (Zaveloff 1988). The Northern Pocket Gopher has 20 teeth with a shallow groove near the inner side of each upper incisor (Burt and Grossenheider 1964). It begins a gradual molting in spring, marked by a moving band of fur which progresses from the blackish nose to base of tail by the end of the summer.

Habitat

Uses a wide variety of habitats, from cultivated fields and prairie to alpine meadows (Jones et al. 1983). It avoids only dense forests, very shallow, rocky soils, and areas with poor snow cover where the soil freezes over (Hoffman and Pattie 1968).

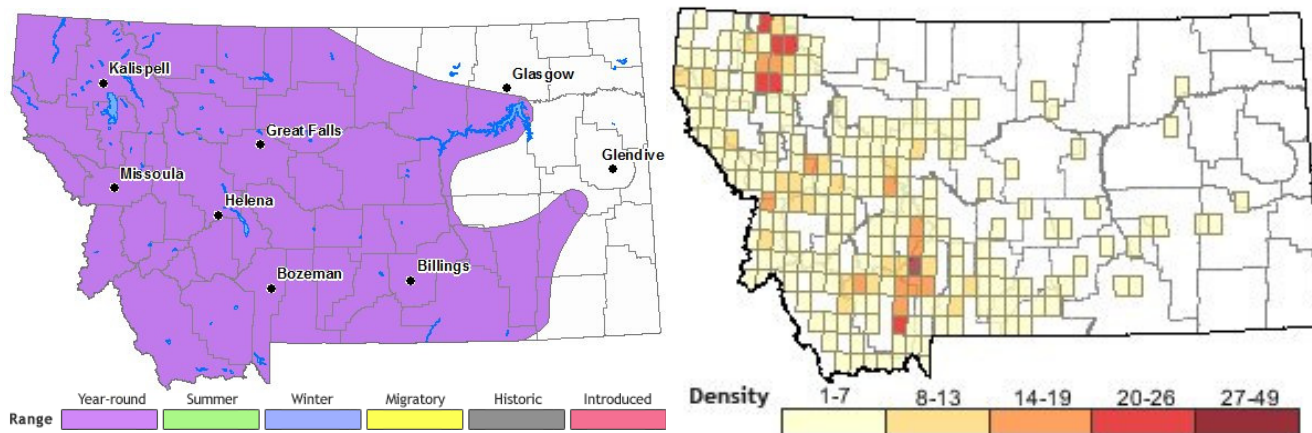
Northern River Otter - *Lontra canadensis*

http://FieldGuide.mt.gov/detail_AMAJF10010.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 1482

General Description

The adult Northern River Otter in Montana weighs around 20 pounds and measures close to 47 inches long. Its thick, powerful tail makes up nearly 20 inches of that length. Small eyes and ears, a broad, flattened head, long cylindrical form, and four webbed feet suit it for its semiaquatic life. In addition, its fur, dark brown on top, silvery or paler brown on the throat, chest, and underside, has special qualities. The long guard hairs remain pliable in very cold weather (Ulrich 1986), and the dense underfur traps air to insulate it in water. The Northern River Otter can dive to 45 feet and stay underwater for some minutes (Zaveloff 1988). It is more nocturnal in summer and its eyes reflect a faint amber glow at night. Its short, muscular legs move surprisingly well on land, and is usually seen traveling in pairs (Foresman 2001). It has 36 teeth.

Habitat

High flow volume water, densely vegetated and undercut banks preferable, non-turbid water and presence of sloughs and side channels to serve as brood rearing habitat are also important in winter. Open-water stream channels used (Zackheim 1982).

Northern Short-tailed Shrew - *Blarina brevicauda*

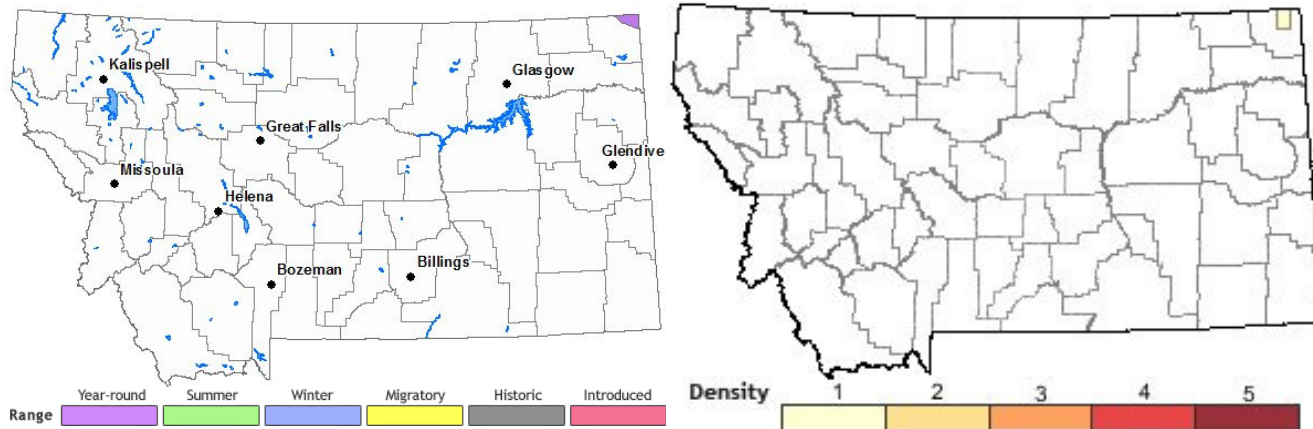
http://FieldGuide.mt.gov/detail_AMABA03010.aspx



Species of Concern

Global Rank: G5
State Rank: S1S3

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 1

General Description

The Northern Short-tailed Shrew is relatively large and robust, with inconspicuous ears and minute eyes. The snout is pointed and somewhat proboscis-like but relatively shorter and thicker than in other shrews. The tail is relatively short (< 20% of total length), hairy, and faintly to distinctly bicolored. Dorsal pelage is slaty gray, darker in winter than summer (Jones et al. 1983, van Zyll de Jong 1983, George et al. 1986). Large adult size and relatively short tail distinguishes this species of shrew from any other in Montana.

Habitat

Considered hypothetical in extreme northeastern Montana since at least 1968 (Hoffmann and Pattie 1968) until two captured in August 2005 in Sheridan County in marshy, prairie pothole habitat about 1.35 miles (2.2 km) south of the Saskatchewan border. Farther east, within the main range of the species, Northern Short-tailed Shrews are most common in hardwood forests with deep leaf litter and in brushy sites adjacent to ponds and streams, less common in conifer forest and grassland. In Manitoba this shrew is reported to be most common in grass-sedge marsh and willow-alder shrubs (Jones et al. 1983, van Zyll de Jong 1983, George et al. 1986).

Norway Rat - *Rattus norvegicus*

http://FieldGuide.mt.gov/detail_AMAFF21020.aspx



Exotic Species (not native to Montana)

Global Rank: G5

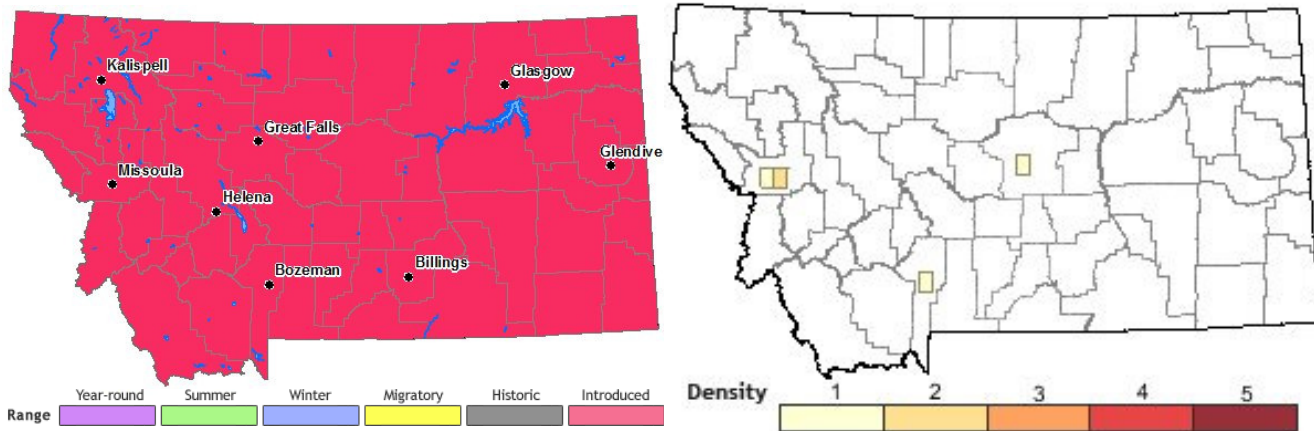
State Rank: SNA

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 5

General Description

The Norway Rat, an unwelcome species that introduces itself along with human migrations, is known mainly for its habits carried to extremes - digging and gnawing through huge food stockpiles, electrical wires, and pipes - and the disease epidemics it has caused. It measures from 12 to 18 inches and weighs from 6 3/4 to 17 ounces in Montana. It is a thickset rodent, with grayish brown coarse fur above and a gray underside. Black hairs sprinkled throughout its upper coat make it look grizzled (Foresman 2001). It has large bare ears and a round, scaly tail.

Habitat

Probably restricted to human habitation, dumps, feed lots, haystacks, feed mills, and grain storage elevators (mostly in valley bottoms). Cities, perhaps farms and ranches.

Nutria - *Myocastor coypus*

http://FieldGuide.mt.gov/detail_AMAFK01010.aspx



Exotic Species (not native to Montana)

Global Rank: G5

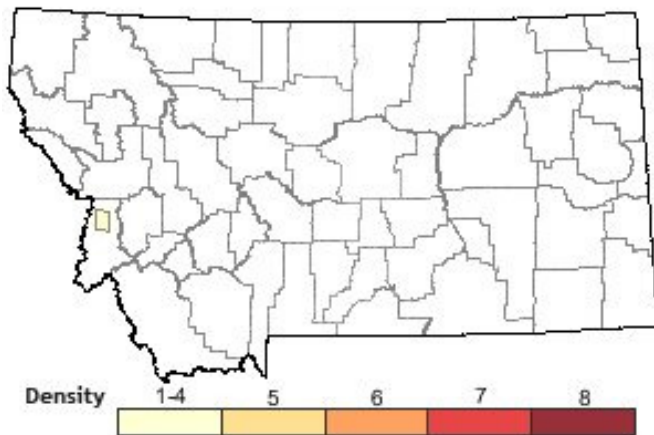
State Rank: SNA

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 4

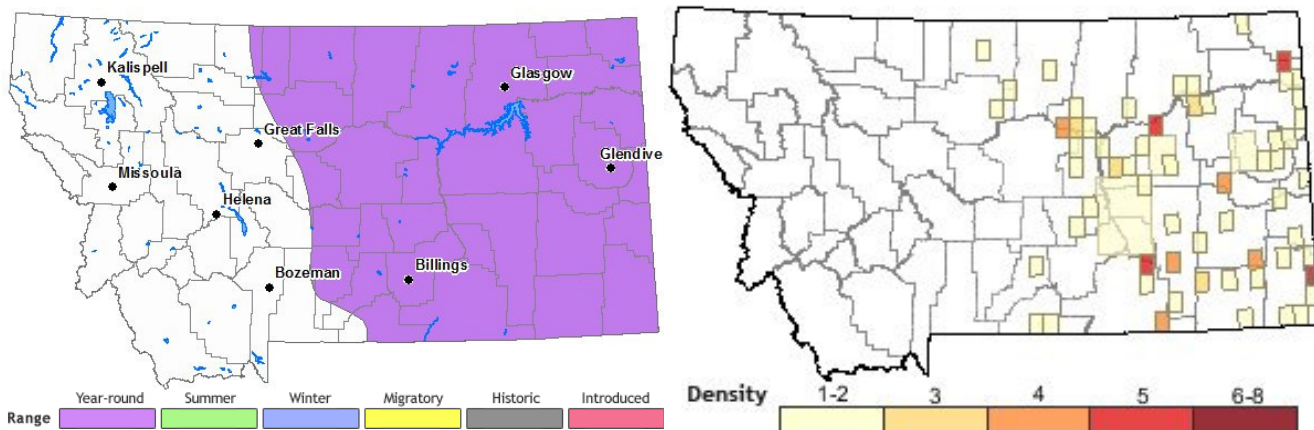
Olive-backed Pocket Mouse - *Perognathus fasciatus*

http://FieldGuide.mt.gov/detail_AMAFD01010.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 120

General Description

The Olive-backed Pocket Mouse (Wyoming Pocket Mouse) measures at most 5 5/8 inches as an adult, with its tail being half or more of that length. It weighs under 1/2 ounce. Its silky fur is olive-gray, with a top band of black and olive (Zeveloff 1988). A yellowish-buff line marks its sides and the patches of fur behind its ears are light yellow. It is buffy to pure white below. Like all the members of its biological family, it has fur-lined cheek pockets for storing food, which open on each side of its mouth. The well-developed legs and 3/4-inch-long hind feet enable it to hop and jump. Active at night, the Olive-backed Pocket Mouse's eyes appear to glow with a faded amber light. It has 20 teeth, the upper incisors having grooved faces (Burt and Grossenheider 1964).

Habitat

A wide variety of grassland and soil types. Grazed and ungrazed meadows on sandy soils, shortgrass and sage near sandy draw. Sage-grassland, creek and grassland types.

Ord's Kangaroo Rat - *Dipodomys ordii*

http://FieldGuide.mt.gov/detail_AMAFD03010.aspx



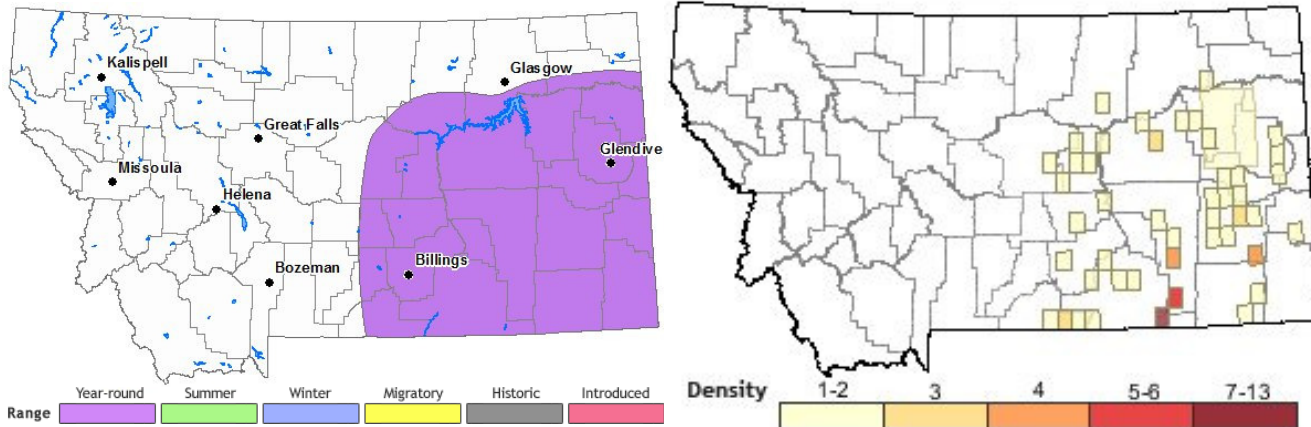
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 84

General Description

The Ord's Kangaroo Rat measures about 10 1/2 inches head to tail, with the tail comprising half or more of that length. It weighs about 2 1/2 ounces. In Montana, it is a dark cinnamon buff on top and pure white below (Foresman 2001). It has white patches above its eyes and at the base of its ears, and the extremely large hind feet are white with five toes (Zeweloff 1988). The tail appears to have four stripes, two dark top and bottom stripes, and two white side stripes. The lower stripe tapers to the end of the tufted tail. Like the jumping mice, the Ord's Kangaroo Rat has fur-lined cheek pockets for storing food, which open on each side of its mouth. At night its eyes appear to glow with a faded amber light. It has 20 teeth, the upper incisors having grooved faces. The lower incisors are rounded (Burt and Grossenheider 1964). Able to hear a rattlesnake coiling or an owl flying, the Ord's Kangaroo Rat uses fast, ricocheting jumps ruddered by its long tail to escape danger (Kritzman 1977).

Habitat

Sandy areas along dry streams and on flats. Sage-grassland areas.

Pallid Bat - *Antrozous pallidus*

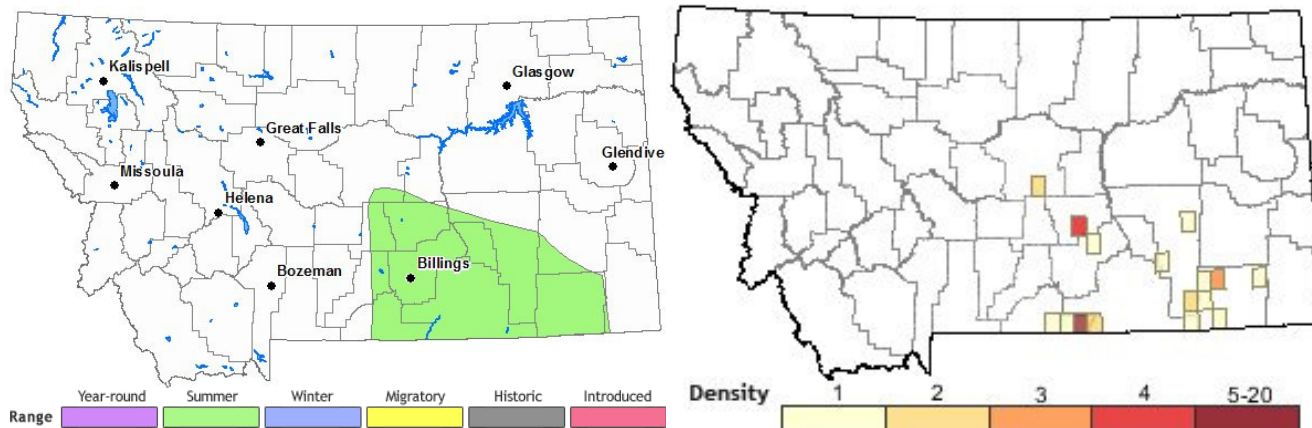
http://FieldGuide.mt.gov/detail_AMACC10010.aspx



Species of Concern

Global Rank: G5
State Rank: S2

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 43

General Description

The Pallid Bat is large and pale, with large ears (not joined at base), large eyes, a simple muzzle, and a yellowish drab dorsal pelage that is paler towards the hair tips and darker at the base (palest in deserts, darkest along coast). The calcar lacks a keel. The total length is 92 to 135 millimeters, tail length is 35 to 53 millimeters, hind foot length is 11 to 16 millimeters, ear length is 21 to 37 millimeters, forearm length is 45 to 60 millimeters, and skull length is 18.6 to 24 millimeters. Females tend to be larger than males (mass 13.6 to 24.1 grams in males, 13.9 to 28.0 grams in females) (Hermanson and O'Shea 1983). The skull has 28 teeth (dental formula: I 1/2, C 1/1, P 1/2, M 3/3) (Nagorsen and Brigham 1993).

Habitat

Habitat at the Carbon County sites is Utah juniper-black sagebrush (*Juniperus osteosperma*-*Artemisia nova*). The Rosebud County site is in an area of ponderosa pine (*Pinus ponderosa*) savannah and big sagebrush (*Artemisia tridentata*). Both areas have rock outcrops (limestone or sandstone) in the immediate vicinity or within short flying distance. This species has not yet been detected at rock crevices, caves or abandoned mines in Montana; most observations have been at water sources (spring-fed streams or ponds; e.g. Carbon County) (Shryer 1980). However, habitat use in Montana by this species remains poorly known and unstudied.

At other locations, Pallid Bats have been found in arid deserts, juniper woodlands, sagebrush shrub-steppe, and grasslands, often with rocky outcrops and water nearby. They are less abundant in evergreen and mixed conifer woodlands, but in British Columbia are found in ponderosa pine forest near cliffs (Nagorsen and Brigham 1993). They typically roost in rock crevice or buildings, less often in caves, tree hollows, under bridges, and in abandoned mines (Hermanson and O'Shea 1983, Verts and Carraway 1998); night roosts often are in caves in Oklahoma (Caire et al. 1989). Four summer roosts in Wyoming were in rock shelters (1), caves (2), and mines (1) (Priday and

Luce 1997). Day and night roosts are usually distinct. In Oregon, night roosts were in buildings, under rock overhangs, and under bridges; Pallid Bats generally were faithful to particular night roosts both within and between years (Lewis 1994). Night roosts in British Columbia were often in cavities in ponderosa pine (Nagorsen and Brigham 1993). Day roosts include rock piles, tree hollows, and rock crevices. Pallid Bats found in caves or mines usually use crevices within these places (Hermanson and O'Shea 1983, Caire et al. 1989). Maternity colonies are often located in horizontal crevices in rock outcrops and man-made structures, where temperatures are a fairly constant 30 degrees.

Pika - *Ochotona princeps*

http://FieldGuide.mt.gov/detail_AMAEA01020.aspx



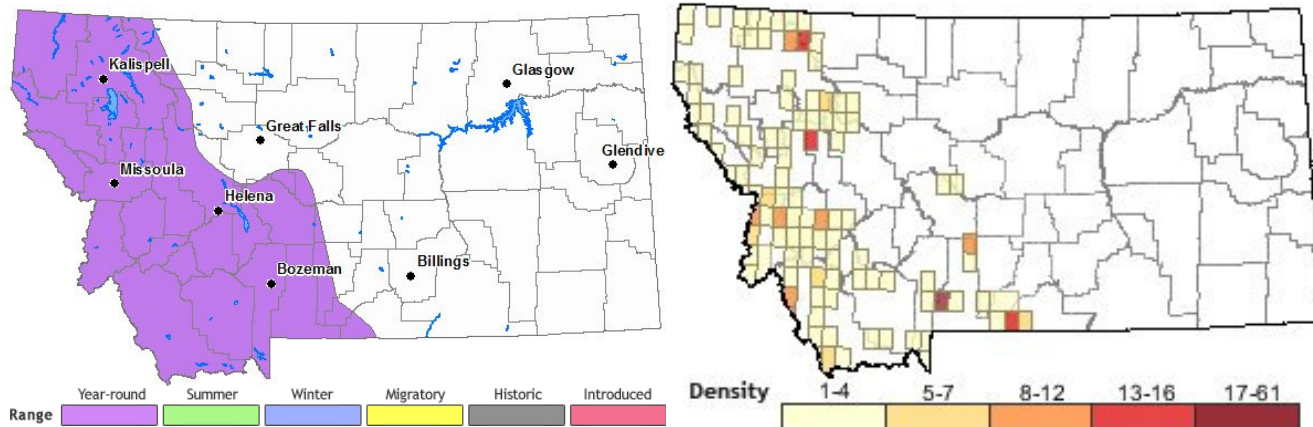
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 488

Habitat

Talus slides, boulder fields, rock rubble (with interstitial spaces adequate for habitation) near meadows. Usually at high elevation but mid-elevation possible if suitable rock cover and food plants present (Hoffmann and Pattie 1968).

Porcupine - *Erethizon dorsatum*

http://FieldGuide.mt.gov/detail_AMAFJ01010.aspx



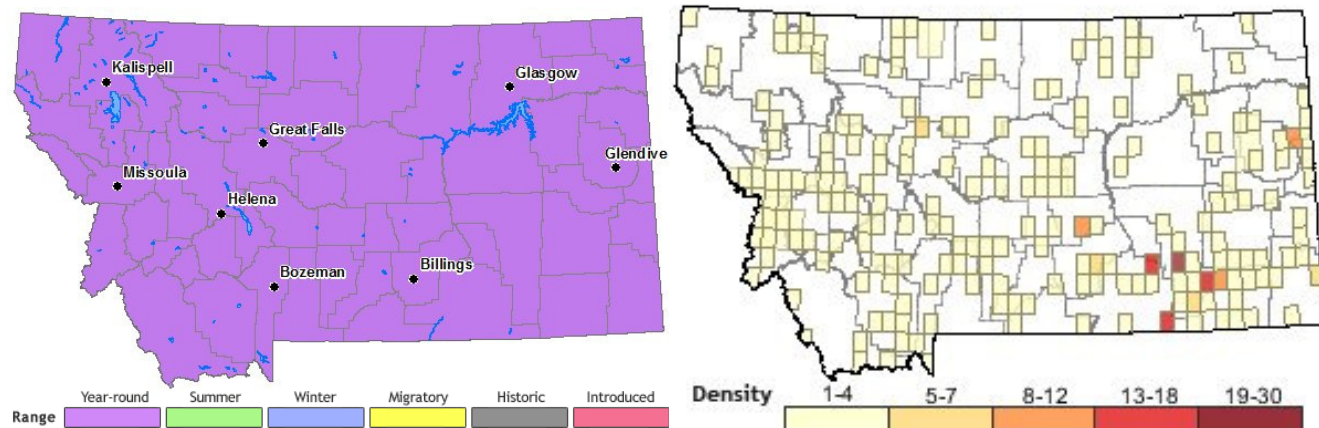
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 483

General Description

Porcupine adults in the Northwest average 30 inches long and 20 pounds in weight. Round, short-legged, and slow in movement, they are protected by a coat of quills that covers all but their underside and the insides of their legs. Up to 30,000 of these modified hairs, yellowish white and black- or brown-tipped, mix with coarse guard hairs, and lay over thick, brownish underfur. The hollow quill shafts may be up to 5 inches in length and the guard hairs twice as long. They concentrate on the rump and short tail. The Porcupine sheds this coat yearly. Long, heavy claws enable the Porcupine to climb and curl up in trees. Its excellent hearing and sense of smell make up for poor vision (Foresman 2001). At night the Porcupine's bright eyes appear red. Its grunts and high-pitched cries can be heard from a distance (Burt and Grossenheider 1964). Newborns are born with teeth, eyes open, and soft quills that harden within an hour. They can climb the same day.

Habitat

Common in montane forests of western Montana, also occurs in brushy badlands, sagebrush semi-desert and along streams and rivers (Hoffmann and Pattie 1968). Rockfall caves, ledge caves, hollow trees, or brushpiles for dens (Dodge 1982).

Prairie Vole - *Microtus ochrogaster*

http://FieldGuide.mt.gov/detail_AMAFF11140.aspx



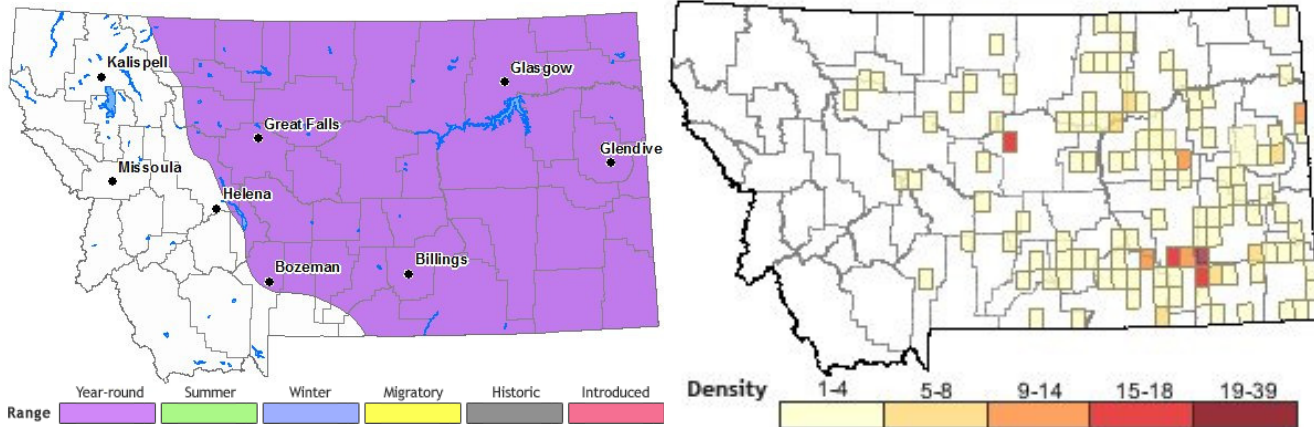
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 395

General Description

The adult Prairie Vole measures nearly 6 inches, including its short 1 1/4-inch tail, and weighs about 1 1/2 ounces. Its back is grayish brown, with black or brownish-yellow-tipped hairs. The side fur is lighter gray, and the underside may be yellow ochre, light cinnamon, or whitish gray. It has a relatively large head in proportion to its small bright eyes and ears (Foresman 2001).

Habitat

Dry grassland and sagebrush; grass semi-desert, where grass is dense enough to provide adequate cover for runway construction. Will occupy riparian habitat in absence of *M. pennsylvanicus*.

Preble's Shrew - *Sorex preblei*

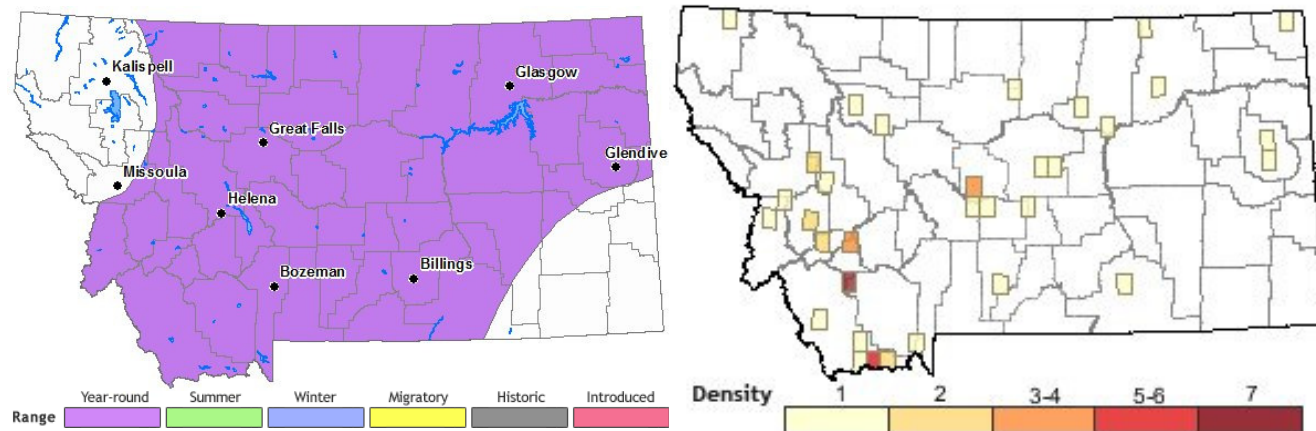
http://FieldGuide.mt.gov/detail_AMABA01030.aspx



Species of Concern

Global Rank: G4
State Rank: S3

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 54

General Description

Like other members of the genus *Sorex*, the snout is long and pointed, and the eyes are small. The dorsal pelage is dark brown to dark gray, and the ventral pelage is silvery-gray. The tail is bicolored, olive-brown above and hazel-brown below. The skull has 32 teeth (dental formula: I 3/1, C 1/1, P 3/1, M 3/3); the 5 upper teeth with single cusps that are present posterior to the first incisor are termed the unicuspid (U), and include 2 incisors, 1 canine, and 2 premolars. The tine on the medial edge of the first incisor is long, acutely pointed, and set within the pigmented area; U3 is as large or larger than U4. Ranges of external measurements (in millimeters) are: total length 77 to 95, tail length 28 to 38, hind foot length 7 to 11, ear length 8 to 11, weight 2.1 to 4.1 grams (Cornely et al. 1992, Verts and Carraway 1998). Published cranial measurements (in millimeters) are: condylobasal length 13.8 to 15.1, palatal length 5.4 to 5.8, cranial breadth 7.0 to 7.2, interorbital breadth 2.9 to 3.1, maxillary breadth 3.8 to 4.2, dentary length 5.6 to 6.7, length of mandibular tooth row (C1-M3) 3.8 to 4.2.

Some Montana specimens (n = 14) exceed some reported values: condylobasal length 13.5 to 14.6, palatal length 5.4 to 6.2, cranial breadth 7.0 to 7.5, interorbital breadth 2.4 to 2.6, maxillary breadth 4.0 to 4.2, dentary length 5.9 to 6.3, length of mandibular tooth row (C1-M3) 4.0 to 4.2 (Hoffmann et al. 1969, Hendricks and Roedel 2002, P. Hendricks unpublished data).

Habitat

Most Preble's Shrews in Montana have been captured in sagebrush-grassland habitats (Hoffmann et al. 1969, Foresman 2001, Hendricks and Roedel 2002), sometimes in openings surrounded by subalpine coniferous forest. They have been taken in Beaverhead County in stabilized sandhills habitat of about 40 to 60% vegetation cover, dominated by grasses (*Stipa comata*, *Festuca idahoensis*, *Agropyron dasystachyum*) and shrubs (*Artemisia tridentata*, *A. tripartita*, *Chrysothamnus nauseosus*, *C. viscidiflorus*, and *Tetradymia canescens*), with isolated dense patches of *Opuntia fragilis* present (Hendricks and Roedel 2002). Preble's Shrew was also present at two other grazed sites (in Beaverhead and Powell counties) dominated by medium-stature (0.5 to 1.5 meters tall) sagebrush; at both sites, sagebrush cover was about 25% (P. Hendricks unpublished data).

Throughout its range, the Preble's Shrew occupies a variety of habitats, including arid and semiarid shrub-grass associations, openings in montane coniferous forests dominated by sagebrush, willow-fringed creeks and marshes, bunchgrass associations, sagebrush-aspen associations, sagebrush-grassland, oak chaparral, open ponderosa pine-Gambel oak stands, and alkaline shrubland (Williams 1984, Ports and George 1990, Cornely et al. 1992, Long and Hoffmann 1992, Kirkland and Findley 1996, Verts and Carraway 1998).

The bulk of Preble's Shrews captured have come from arid habitats, often in the immediate or nearby presence of sagebrush. In southwestern Wyoming, individuals were captured in sagebrush-steppe: islands of *Artemisia tridentata*, *Purshia tridentata*, and *Amelanchier utahensis* more than 30 centimeters tall surrounded by large expanses of *Artemisia* less than 30 centimeters tall (Kirkland et al. 1997). In southern British Columbia, Preble's Shrews were captured in lightly to moderately grazed grassland patches surrounded by scattered stands of Douglas-fir (*Pseudotsuga menziesii*) or ponderosa pine. Big sagebrush, scattered snowberry (*Symphoricarpos albus*), or antelope bush (*Purshia tridentata*) about 1 to 2 meters in height formed dense shrub cover of 30 to 80% (Nagorsen et al. 2001); cheatgrass (*Bromus tectorum*) was sometimes dominant, and the nearest standing water to trap sites was 350 to 2300 meters distant.

Pronghorn - *Antilocapra americana*

http://FieldGuide.mt.gov/detail_AMALD01010.aspx



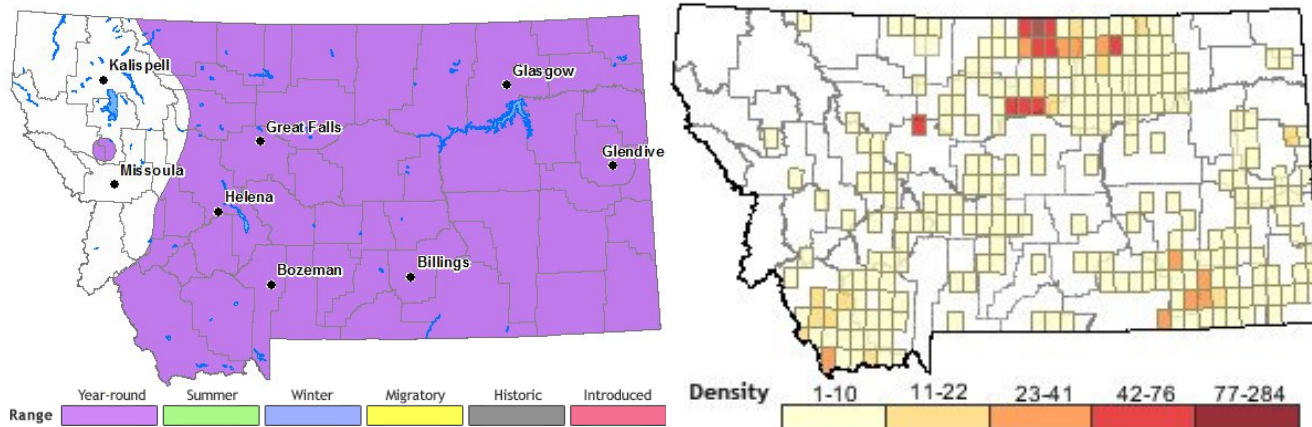
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 3363

General Description

Coat rich russet-tan with white underside; large white rump patch; two white bands across throat; black markings on head; eyes large, dark; dew claws absent; horns of adult bucks 13 to 16 inches long with prongs and curved tips; horn sheaths shed annually; about 70% of adult does have horns (averaging 1 1/2 inches long); adult bucks weigh 125 lbs., does 110 lbs. Adult bucks territorial from March through September; does and fawns in small herds drift on and off buck's territories in spring and summer; herds of bachelor bucks excluded from territories; all ages and both sexes congregate in winter herds; during severe winters, herds drift for long distances seeking food; barriers to such movements limit populations; excited animals emit explosive snorts, erect white rump patches, and emit musky odor from glands in rump patches. Upperparts are reddish brown to tan; underparts, lower sides, rump, and two bands on the neck are white; neck has a short black mane; male has a black band along each side of the snout, a black patch on each cheek, and sometimes black bands on the neck; males and most females have horns (larger and usually forked in males; sheaths are shed annually); two toes on each hoofed foot; head and body length 100 to 150 cm, tail 8 to 18 cm, mass 36 to 70 kg (Nowak 1991).

Habitat

Open, rolling sagebrush and grasslands. Winter habitats less diverse than summer. Sagebrush-grassland preferred (Bayless 1967). Summers: mixed shrub, perennial grass-lands, silversage and annual forb types (Armstrup 1978). Also croplands (Wentland 1968). Prefer to corroborate with seasonal food habits.

Pygmy Rabbit - *Brachylagus idahoensis*

http://FieldGuide.mt.gov/detail_AMAEB04010.aspx



Species of Concern

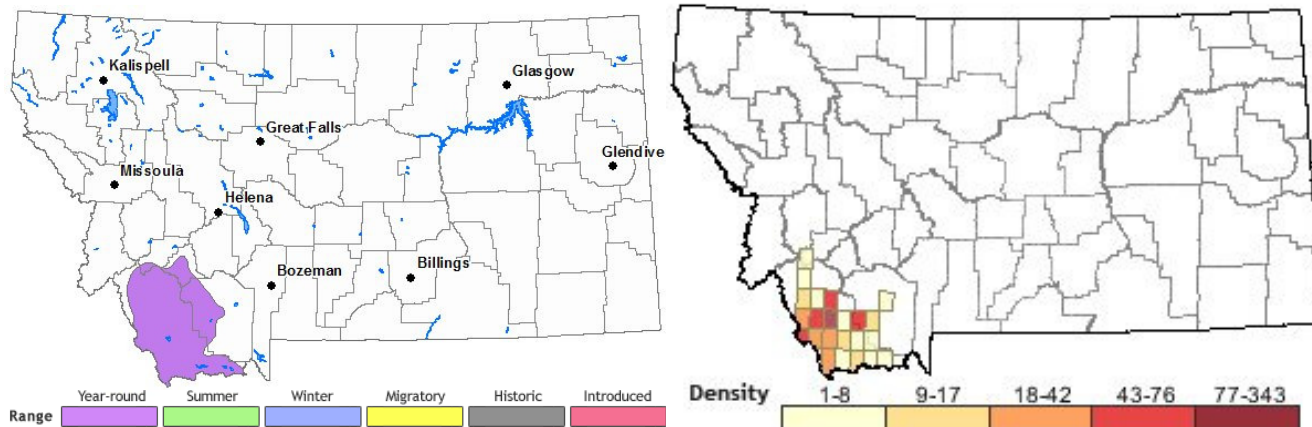
Global Rank: G4
State Rank: S3

AGENCY STATUS

USFWS:

USFS: SENSITIVE

BLM: SENSITIVE



Number of Observations: 1221

General Description

The body size of Pygmy Rabbits is smaller than any other North American leporid. The hind legs are very short, and the hind feet comparatively broad and heavily haired. The ears are short, rounded and densely haired inside and out, and are edged with buff. Whiskers are black and white. The tail is small and inconspicuous, and buff on all surfaces. The upper parts are buffy-gray, the nape and anterior surfaces of the legs are cinnamon-buff; by winter pelage becomes worn and appears silver-gray. On the skull the supraorbital processes are relatively long both anteriorly and posteriorly; auditory bullae are inflated. Molariform teeth are relatively small, with the first upper one possessing but a single reentrant angle. There are 28 teeth in the skull (dental formula: I 2/1, C 0/0, P 3/2, M 3/3). Body measurements are: total length 232 to 305 millimeters, tail 15 to 24 millimeters, hind foot 66 to 76 millimeters, adult mass 246 to 458 grams (Green and Flinders 1980a, Verts and Carraway 1998, Foresman 2001a).

Habitat

Occupied habitats in Montana include shrub-grasslands on alluvial fans, floodplains, plateaus, high mountain valleys, and mountain slopes, where suitable sagebrush cover and soils for burrowing are available. Some occupied sites may support a relatively sparse cover of sagebrush and shallow soils, but these usually support patches of dense sagebrush and deeper soils. Big sagebrush was the dominant shrub at all occupied sites, averaging 21.3 to 22.6% coverage; bare ground averaged 33% and forbs 5.8%. Average height of sagebrush in occupied sites was 0.4 meter (Rauscher 1997). In southwestern Wyoming, Pygmy Rabbits selectively used dense and structurally diverse stands of sagebrush that accumulated a relatively large amount of snow; the subnivean environment provided access to a relatively constant supply of food and protection from predators and thermal extremes (Katzner and Parker 1997).

Pygmy Rabbits dig burrows extending to a depth of 1 meter and they form chambers as part of the burrow system. Burrows have been excavated but no nests have been found and the location of nests is not known (Green and Flinders 1980a).

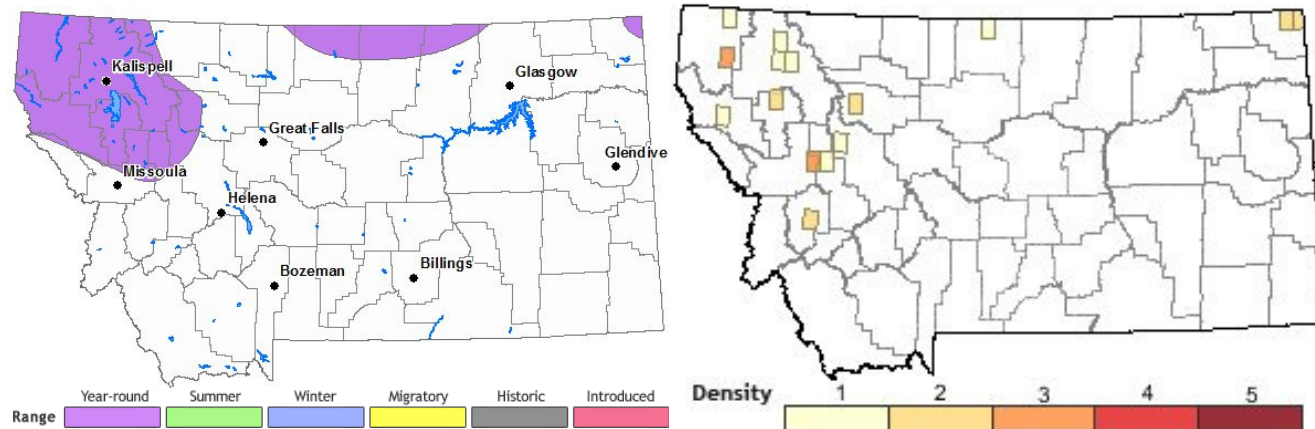
Pygmy Shrew - *Sorex hoyi*

http://FieldGuide.mt.gov/detail_AMABA01250.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 24

General Description

The Pygmy Shrew is a relatively small member of the shrew family. The upperparts in summer are reddish-brown or grayish-brown, becoming paler on the flanks (especially in winter), with whitish, grayish, or rusty-gray underparts. In winter the pelage is brighter, drab above, and paler below. Ranges in external measurements (in millimeters) are: total length 67 to 98, tail length 25 to 34, hind foot 8.5 to 11.5, and a mass of 2.2 to 6.6 grams. Condylbasal length of the skull is 13.4 to 15.8 millimeters, and maxillary breadth is 4.9 to 5.6 millimeters. The skull has 32 teeth (dental formula: I 3/1, C 1/1, P 3/1, M 3/3); the 5 upper teeth with single cusps that are posterior to the first incisor are termed the unicuspid (U), and include 2 incisors, 1 canine, and 2 premolars. The medial edge of the first incisor has a lengthy tine; U3 and U5 are small (U3 disc-like), easily overlooked upon superficial examination, and make it appear as though there are only three unicuspid. On the lower jaw, the length of the dentary is usually less than 6.1 millimeters, I1 is set at an angle more than 10 degrees from the horizontal ramus of the dentary, the length of C1-M3 is less than 4.2 millimeters, and the height of the coronoid process is usually 3.1 to 3.4 millimeters (Long 1974, Diersing 1980, Junge and Hoffmann 1981, Carraway 1995).

Habitat

Dry, open coniferous forests (ponderosa pine, western larch) appear to be preferred by Pygmy Shrews in Montana. Individuals have also been captured in mesic Douglas-fir-lodgepole pine forests, and sagebrush-steppe in northern Beaverhead County (Foresman 1999, 2001). Understory plants include *Amelanchier alnifolia*, *Berberis repens*, *Arnica cordifolia*, *Symphoricarpos occidentalis*, *Ribes* spp., *Equisetum* spp., and *Carex* spp. The skull recovered in Hill County (Jean and Hendricks 2001, Hendricks 2001) was found in an area largely of open prairie vegetation (*Bouteloua gracilis*, *Koeleria macrantha*, *Poa secunda*, *Stipa comata*, *Carex filifolia*, *Pascopyrum smithii*) but may have originated in one of the forested uplands nearby. However, a specimen was captured in similar prairie habitat in the pothole region of Sheridan County (D. Flath personal communication).

Throughout its range, the Pygmy Shrew is found in a variety of habitats. It appears to prefer grassy openings in boreal forest, with moist habitats preferred over dry areas. In Kentucky and Tennessee, it was much less active above ground than the Southeastern Shrew (*S. longirostris*) (Feldhamer et al. 1993). Nest sites are not well known. Habitat associations in Manitoba, Wisconsin and Minnesota include mesic forests of hemlock, white pine, aspen, black spruce-tamarack, maple, jack pine, and sometimes in marshy areas (Long 1972, 1974, Wrigley et al. 1979). In eastern South Dakota an individual was captured in cattail-rush habitat on the edge of a slough (Jones et al. 1983). It has been captured in mesic grand fir-subalpine fir-Engelmann spruce forest in the panhandle of Idaho, and ponderosa pine-lodgepole pine-Douglas-fir forest in northeastern Washington (Stinson and Reichel 1985, Foresman 1986). Farther south, in southern Wyoming and northern Colorado, it is associated with bogs and moist spruce-fir forest meadows (Brown 1966, 1967, Armstrong 1972, Clark and Stromberg 1987).

Raccoon - *Procyon lotor*

http://FieldGuide.mt.gov/detail_AMAJE02010.aspx



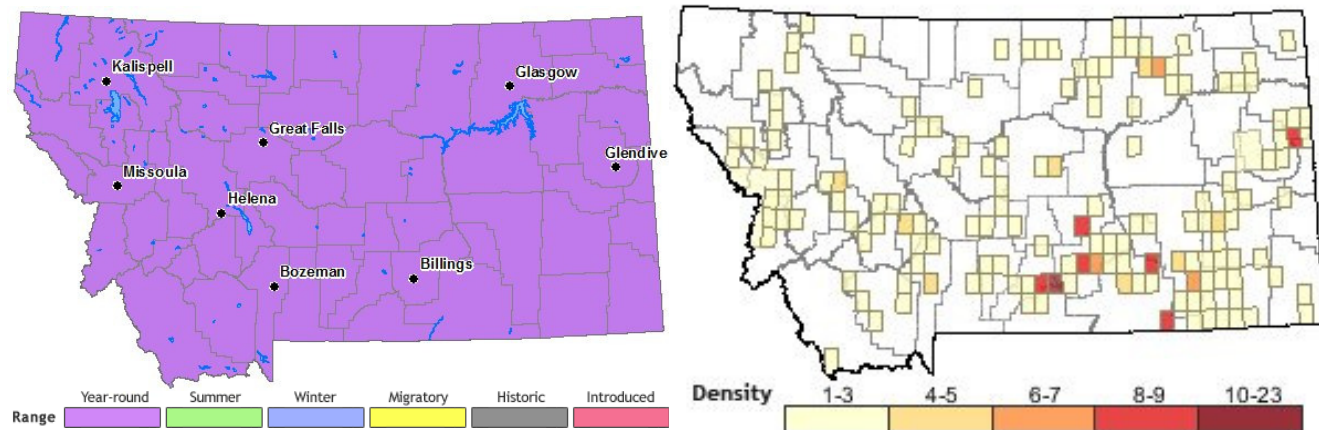
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 352

General Description

Black mask over the eyes and alternating rings of yellowish-white and black on the tail. Flat-footed and body weight variable. Total length: 26 to 40 inches. Weight: 12 to 35 pounds.

Habitat

Inhabits stream and lake borders near wooded areas or rocky cliffs. Most abundant in riparian and wetland habitats. Mostly nocturnal and very intelligent. May use front paws to find food. Sometimes dunks food in water before eating. Does not hibernate. Uses hollow logs, trees, and rock crevices as den sites. Forested riparian habitat; river and stream valleys. Possibly also associated with prairie wetlands. Although tree dens are most common, burrows and crevices, etc. also used (Kaufmann 1982).

Red Fox - *Vulpes vulpes*

http://FieldGuide.mt.gov/detail_AMAJA03010.aspx



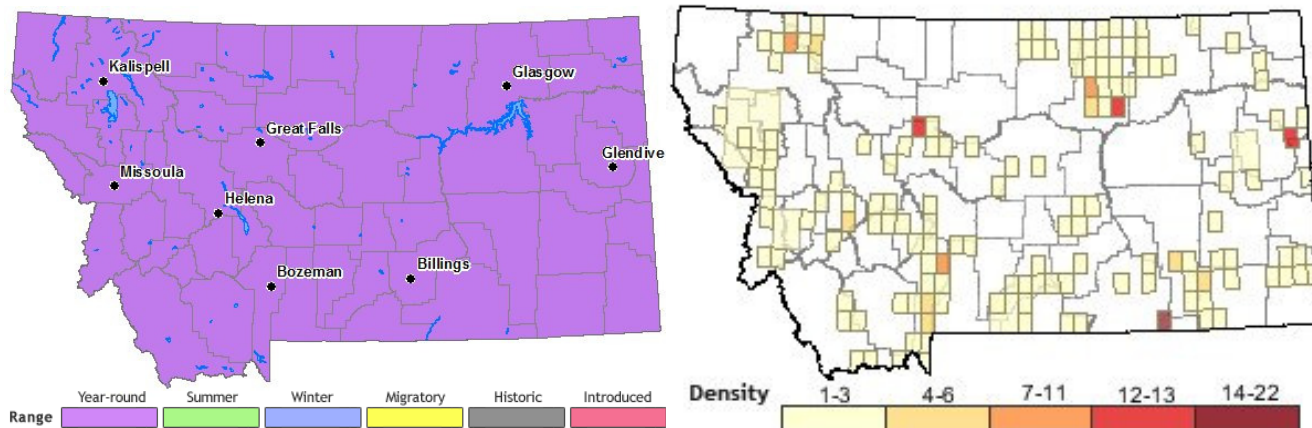
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 373

General Description

Appearance of small dog. Long, bushy tail, pointed ears, slender muzzle, slanted eyes. White tip on the tail. Rufous coloration, various coat colorations or color phases. Total length: 39 to 43 inches. Weight: 10 to 15 pounds.

Habitat

Can survive in a wide range of habitats. Often associated with agricultural areas. Prefers mixture of forest and open country near water. Mostly nocturnal. Hunts by smell. Uses dens for shelter during severe weather and when pups are being reared. Usually uses dens made by other animals. Seldom found far from permanent water. Thrive in bushy successional area where small mammals are most abundant. Occupies diverse habitats. In forest situations uses edge (Jones et al. 1983).

Red Squirrel - *Tamiasciurus hudsonicus*

http://FieldGuide.mt.gov/detail_AMAFB08010.aspx



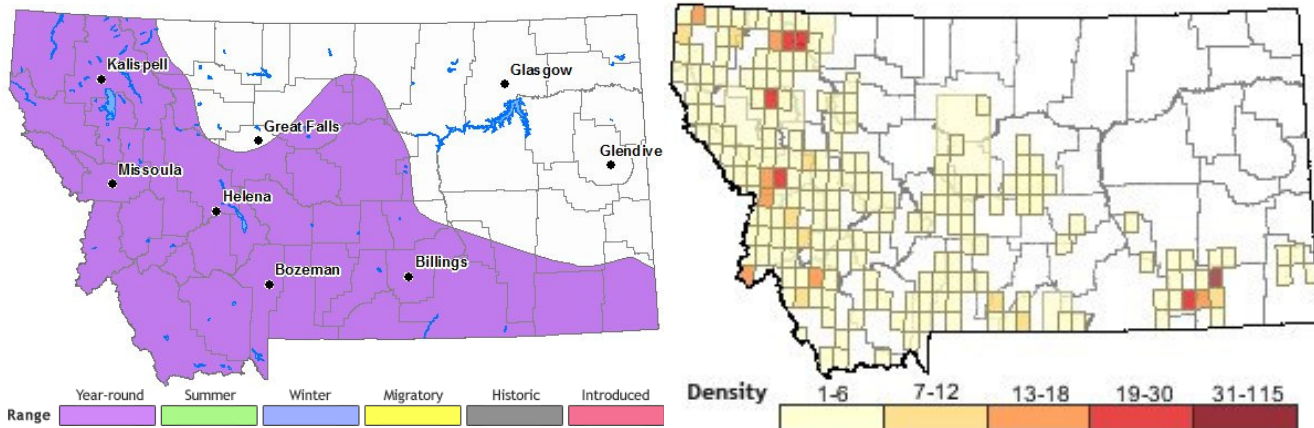
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 1211

Habitat

Most common in montane (yellow pine and Douglas-fir) and subalpine (subalpine fir and Englemann spruce) forests in western MT. Also occurs in drier, more open yellow pine forests of Eastern Montana (Hoffmann 1968).

Red-tailed Chipmunk - *Tamias ruficaudus*

http://FieldGuide.mt.gov/detail_AMAFB02130.aspx



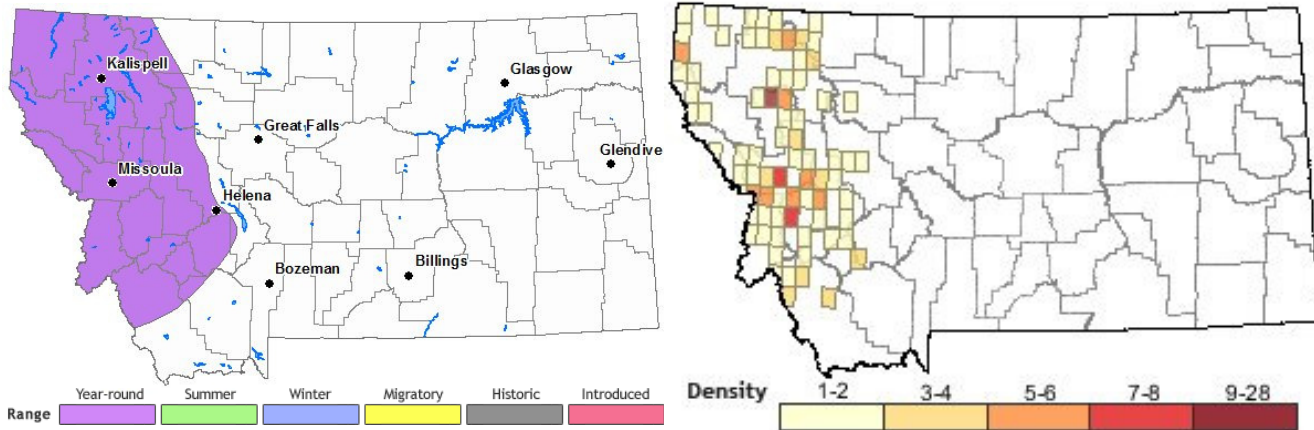
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 232

Habitat

Moist forest. Douglas-fir and subalpine fir. Most abundant in edge openings. Sometimes ranges into alpine except in Glacier National Park area where *T. minimus* occupies alpine habitats (Hoffmann and Pattie 1968, Beg 1969). Will occupy higher elevations with *T. amoenus*.

Richardson's Ground Squirrel - *Urocitellus richardsonii*

http://FieldGuide.mt.gov/detail_AMAFB05040.aspx



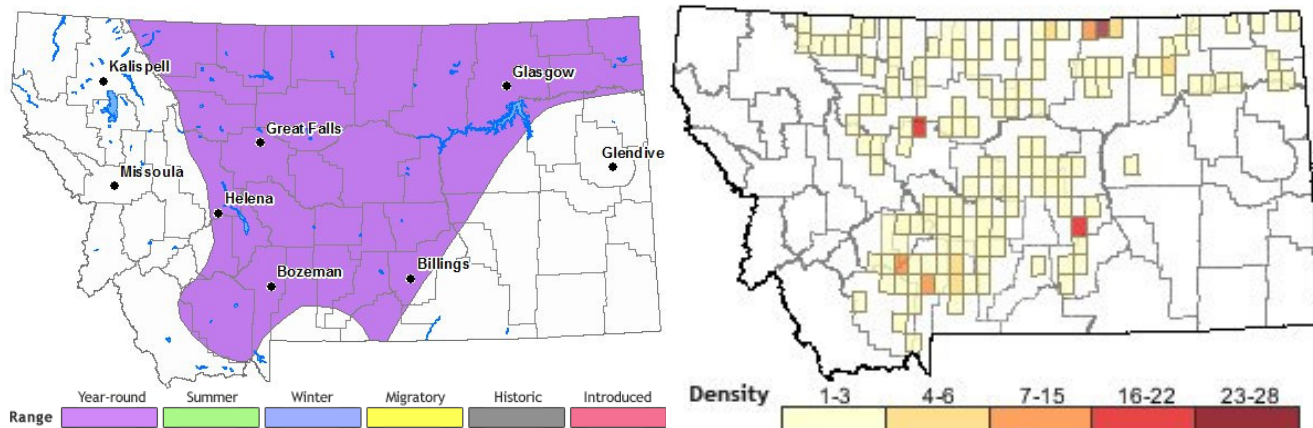
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 373

General Description

The Richardson's Ground Squirrel is a medium-sized ground squirrel of rather uniform coloration. It is buffy yellow to grayish in color. The tail is about one-fourth of the total body length and is blackish to buff with whitish hairs on the outer edges and end. Adults are 7 to 9 inches long and weigh 11 to 18 ounces.

Habitat

Occupies open well-drained land, prairies, and pastures. Can occur on arid shrub-steppe. Less well-adapted to arid shrub-steppe than is *S. elegans*.

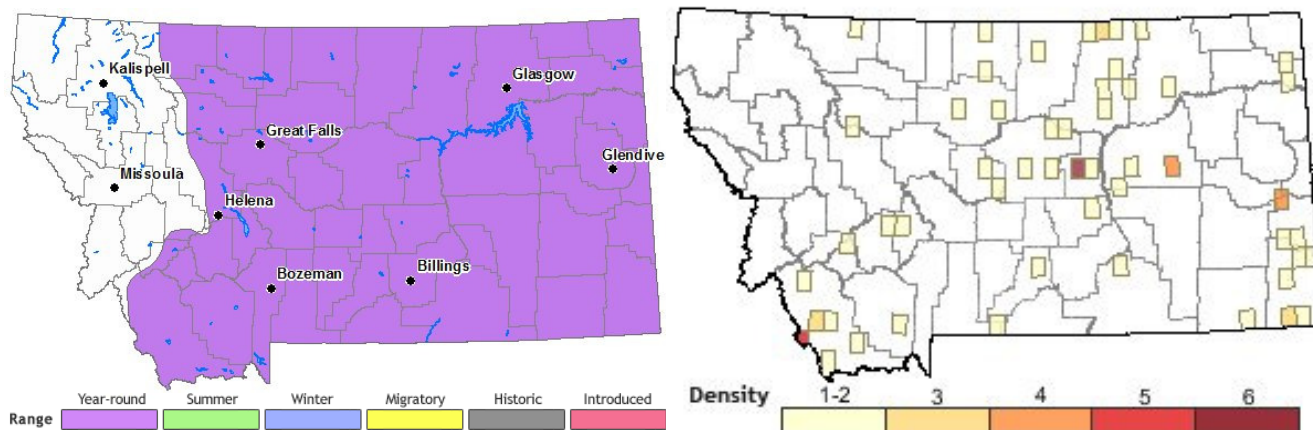
Sagebrush Vole - *Lemmiscus curtatus*

http://FieldGuide.mt.gov/detail_AMAFF13010.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 87

General Description

A medium-sized vole under an ounce in weight, the Sagebrush Vole measures between 4 1/4 and 5 5/8 inches, including its furry, dusky- and white-colored tail. It has thick, pale gray fur, darker above, whitish, silvery, or buffy below. Some individuals may have touches of buff color on their ears or noses (Zeweloff 1988). The feet are white to light gray, thickly covered with fur, with the hind feet being equivalent in length to the short tail (Foresman 2001).

Habitat

Sagebrush flats (Lampe et al. 1974). Associated with *Artemisia* spp., particularly *Artemisia tridentata* (Hoffmann and Pattie 1968). Also may be found in denser vegetation; constructs poorly defined runways. May use dry cattle chips for temporary shelter (Jones et al. 1983).

Short-tailed Weasel - *Mustela erminea*

http://FieldGuide.mt.gov/detail_AMAJF02010.aspx



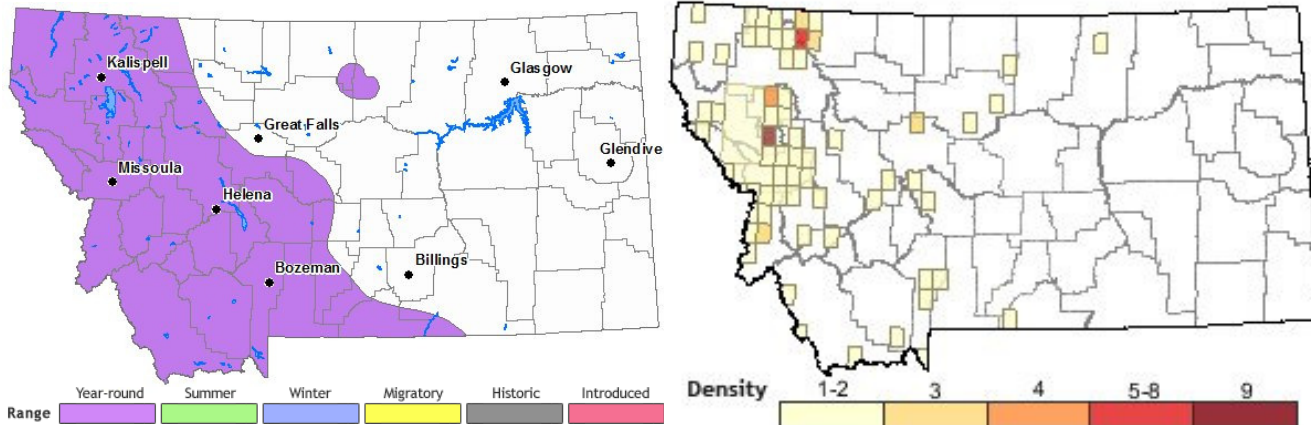
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 108

General Description

Of the three North American weasels (Genus *Mustela*), the Short-tailed Weasel is intermediate in size. Males are distinctly larger than females of the same age. During summer the fur is dark brown with white (not buff) underparts, white feet, and white along the inside of the hind legs. The tip of the tail is black. Molts to entirely white during winter, except for the black on the tip of the tail. Total length: seven to 13 inches. Weight: one to six ounces.

Habitat

Inhabits brushy or wooded areas, usually not far from water. Tends to avoid dense forests. Prefers areas with high densities of small mammals. Most abundant in ecotones. Mostly nocturnal but will hunt during the day. Active throughout the year. Dens in ground burrows, under stumps, rock piles, or old buildings. In Montana, apparently prone to montane forest associations. Elsewhere occupies a diverse range of habitats. Nests in hollow trees, rock piles or burrows.

Silver-haired Bat - *Lasionycteris noctivagans*

http://FieldGuide.mt.gov/detail_AMACC02010.aspx



Potential Species of Concern

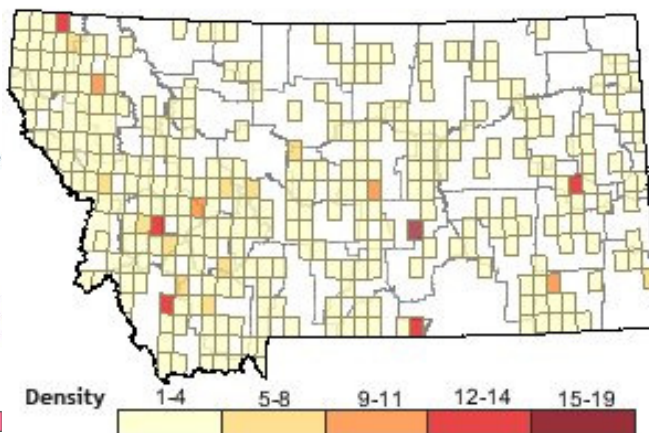
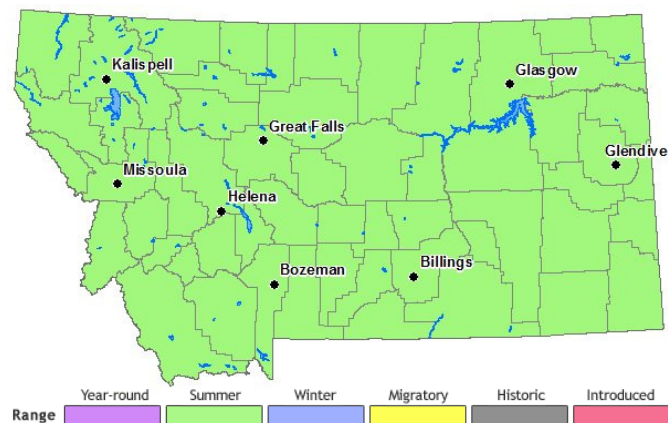
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 991

Habitat

No available information

Snowshoe Hare - *Lepus americanus*

http://FieldGuide.mt.gov/detail_AMAEB03010.aspx



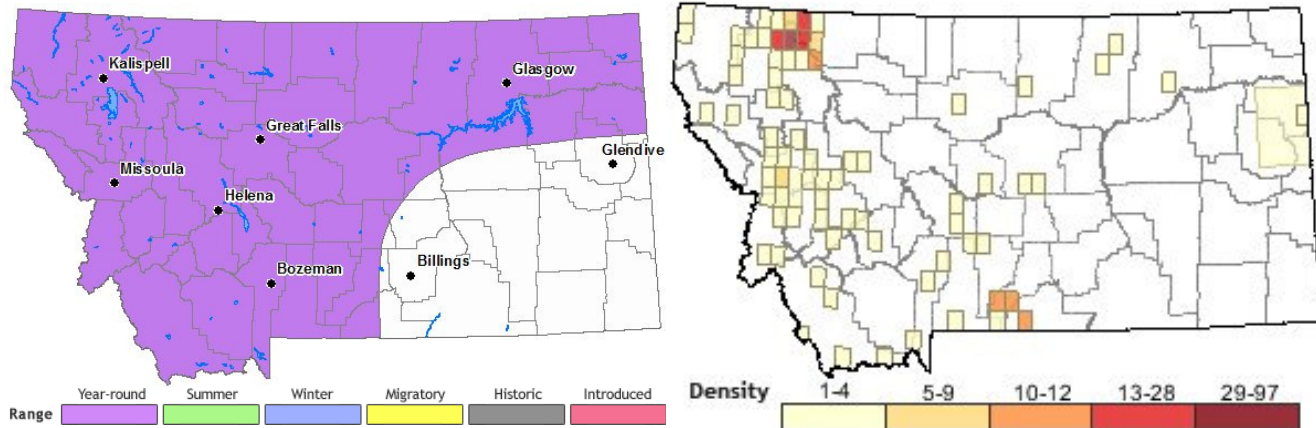
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 436

Habitat

In western MT, apparently preferred fairly dense stands of young pole-sized timber with some use of more open stands, openings, and edges (Adams 1959, Koehler et al. 1979). Uses dense riparian thickets in eastern Montana (Hoffmann et al. 1969).

Southern Red-backed Vole - *Myodes gapperi*

http://FieldGuide.mt.gov/detail_AMAFF09020.aspx



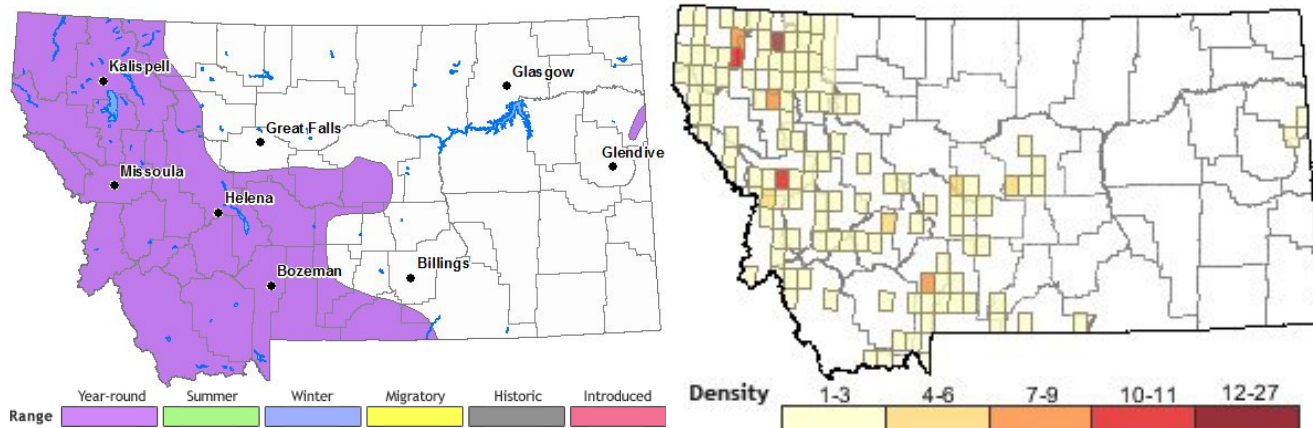
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 364

General Description

The Southern Red-backed Vole has a blunt nose and short ears. It is approximately 6 inches (152 millimeters) long when fully grown. It has buffy gray sides, and a buff-white to silver-gray belly. The wide reddish band which distinguishes it from other mice in Montana traces over its back from the forehead to the base of a short tail.

Habitat

In western MT particularly common in dense subalpine forests, also occurs in more open forest types, even alpine tundra (Hoffmann and Pattie 1968).

Spotted Bat - *Euderma maculatum*

http://FieldGuide.mt.gov/detail_AMACC07010.aspx

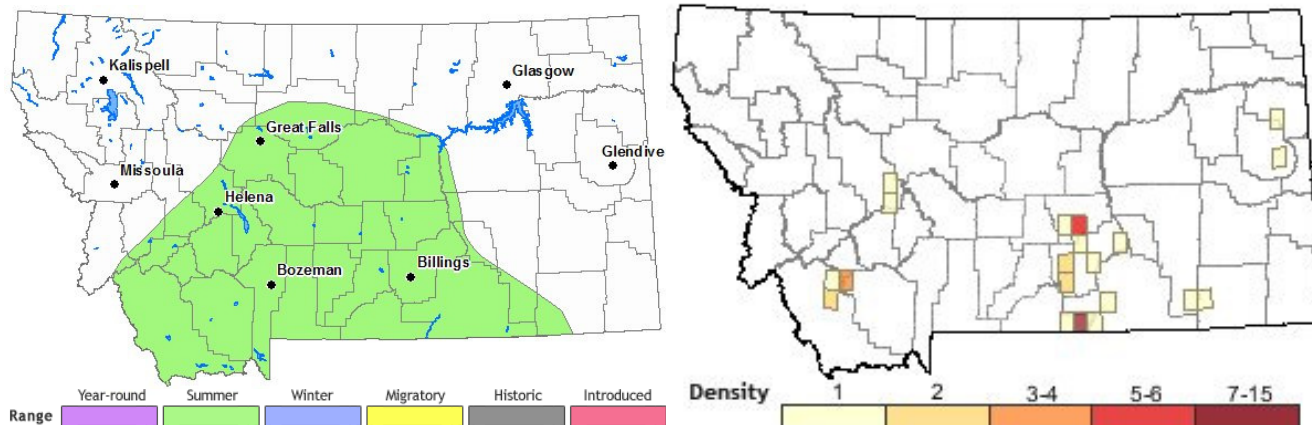


Species of Concern

Global Rank: G4
State Rank: S2

AGENCY STATUS

USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 45

General Description

Spotted Bats have huge pink ears (37 to 50 millimeters long), the dorsum is blackish with a large white spot on each shoulder and on the rump, and white patches at the posterior base of each ear. Total length is 107 to 115 millimeters, forearm length is 48 to 51 millimeters, and weight is 16 to 20 grams. The greatest length of the skull is 18.4 to 19.0 millimeters (small sample). The supraorbital region of the skull is sharply ridged, but a median sagittal crest is absent; 34 teeth are present (Watkins 1977). The newborn young lack any indication of having the adult color pattern (van Zyll de Jong 1985). Four hours after birth, a male weighed 4 grams and measured 59 millimeters in length; tail length was 20 millimeters, hind foot 11 millimeters, ear 12 millimeters, and forearm 21 millimeters.

Habitat

Spotted Bats have been encountered or detected most often in open arid habitats dominated by Utah juniper (*Juniperus osteosperma*) and sagebrush (*Artemisia tridentata* and *A. nova*), sometimes intermixed with limber pine or Douglas-fir, or in grassy meadows in ponderosa pine savannah (Fenton et al. 1987, Worthington 1991b, Hendricks and Carlson 2001). Cliffs, rocky outcrops, and water are other attributes of sites where Spotted Bats have been found (Foresman 2001), typical for the global range. Spotted Bats have been captured foraging over an isolated pond within a few kilometers of huge limestone escarpments in the Big Horn Canyon National Recreation Area, Carbon County (Worthington 1991a, 1991b), and the first record for the state was of an individual that flew in an open window at a private residence in Billings, Yellowstone County (Nicholson 1950). Roost habitats and sites have not been documented in Montana.

In other areas, Spotted Bats have been detected at water sources and in meadow openings, often with large cliffs nearby (Leonard and Fenton 1983, Storz 1995, Perry et al. 1997, Rabe et al. 1998, Gitzen et al. 2001).

Spotted Bats roost in caves, and in cracks and crevices in cliffs and canyons, with which this species is consistently associated; it can crawl with ease on both horizontal and vertical surfaces (Snow 1974, van Zyll de Jong 1985). In British Columbia, individuals used the same roost each night during May through July, but not after early August (Wai-Ping and Fenton 1989). Winter habitat is poorly documented. A possible explanation for the early paucity of collections in natural situations is the Spotted Bat's narrow habitat tolerance (Handley 1959, Snow 1974).

Striped Skunk - *Mephitis mephitis*

http://FieldGuide.mt.gov/detail_AMAJF06010.aspx



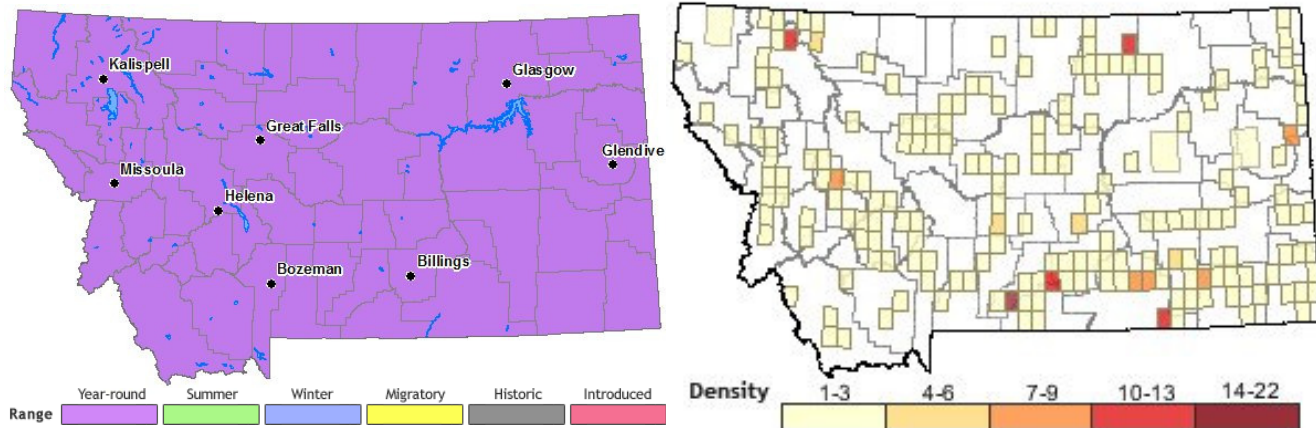
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 481

General Description

About the size of a house cat. Well-developed scent glands that emit a very strong odor. Often the presence of a skunk is first detected by its odor. Black body, narrow white stripe on middle of the forehead, broad white area on nape that usually divides into a V at the shoulders. Great variation in color pattern and size of stripes. Total length: 20 to 28 inches. Weight: six to 14 pounds. Mostly nocturnal and does not hibernate. Uses ground burrows, abandoned building foundations, and wood or rock piles as den sites. Will use dens created by other animals. When frightened or threatened, sprays a strong and long-lasting musk produced by anal scent glands.

Habitat

Lives in a variety of habitats including semi-open country, mixed woods, brushland, and open prairie. Most abundant in agricultural areas where there is ample food and cover. Usually absent where water table is too high for making ground dens. Forest edges, open woodland, brushy grassland, riparian vegetation, cultivated lands (Hoffmann and Pattie 1968).

Swift Fox - *Vulpes velox*

http://FieldGuide.mt.gov/detail_AMAJA03030.aspx



Species of Concern

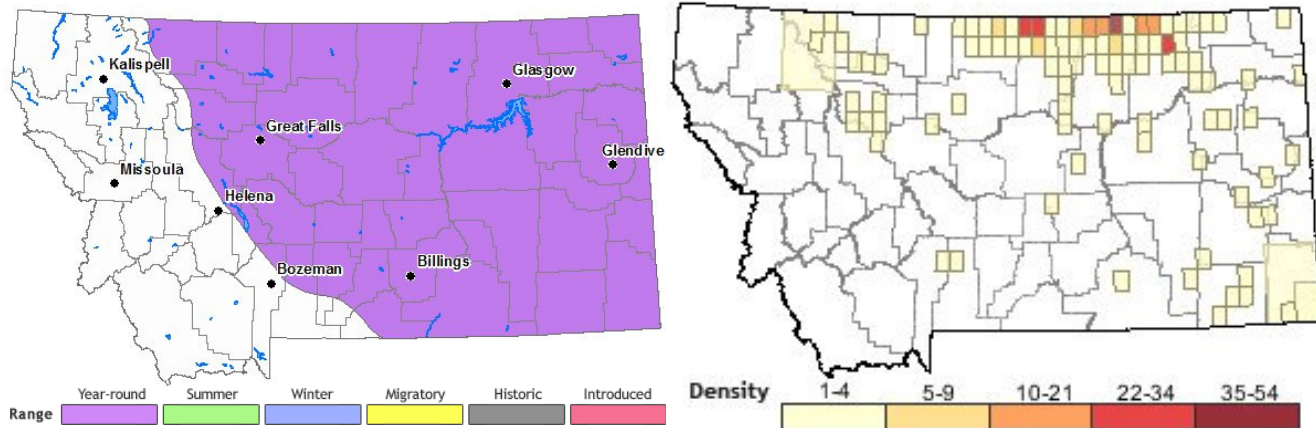
Global Rank: G3
State Rank: S3

AGENCY STATUS

USFWS:

USFS:

BLM: SENSITIVE



Number of Observations: 517

General Description

Swift Foxes are small, weighing 1.8 to 3.0 kilograms, with males averaging larger than females. The winter pelage is dark buffy-gray above, and orange-tan on the sides, legs, and lower surface of the tail. The chest and belly are buff to white and the tail is tipped with black. In summer the coat is shorter, harsher, and more reddish. The length of the head and body is 38 to 53 centimeters and tail length is 23 to 35 centimeters. The length of the ear of adults is 56 to 78 millimeters (Clark and Stromberg 1987, Nowak 1991).

Habitat

Swift Fox inhabit open prairie and arid plains, including areas intermixed with winter wheat fields in north-central Montana. They use burrows when they are inactive; either dug by themselves or made by other mammals (marmot, prairie dog, badger). The burrows are usually located in sandy soil on high ground such as hill tops (Pruss 1999) in open prairies, along fencerows, or occasionally in a plowed field. An individual may use several different dens throughout the year. A statewide assessment of Swift Fox habitat was conducted by the Department of Fish, Wildlife, and Parks in May 1994 to identify large blocks of prairie grassland. Suitable Swift Fox habitat was generally defined as extensive in size (preferably over 100,000 acres), with relatively level topography, and with greater than 50% of the area undisturbed by agriculture. A total of 8,000,000 suitable acres were identified in Montana (Giddings and Knowles 1995).

Thirteen-lined Ground Squirrel - *Ictidomys tridecemlineatus*

http://FieldGuide.mt.gov/detail_AMAFB05090.aspx



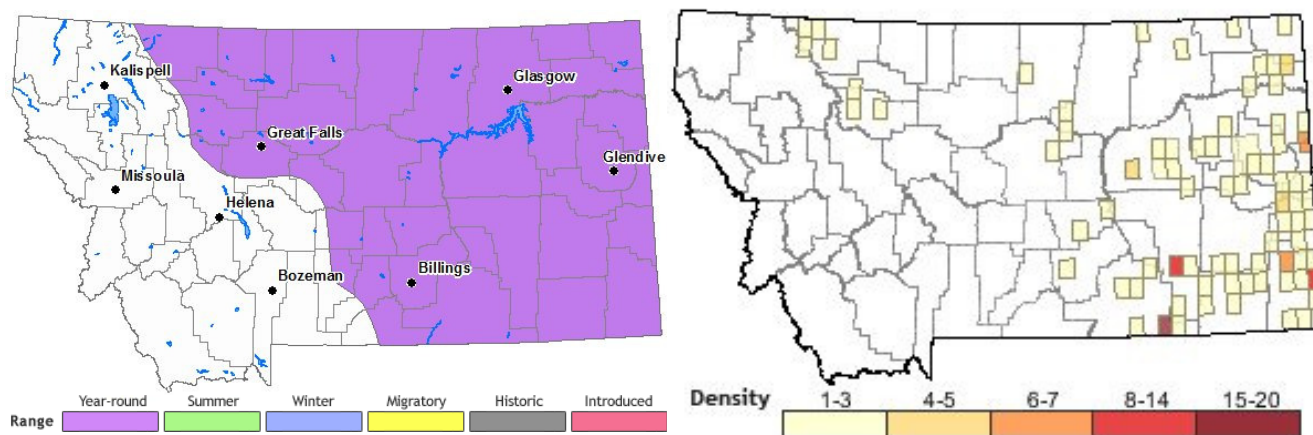
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 193

Habitat

Tallgrass, brushy edges, herbaceous vegetation, dense cover. However, also occurs in shortgrass and sagebrush, upland meadows. May prefer grazed and mowed grasslands.

Townsend's Big-eared Bat - *Corynorhinus townsendii*

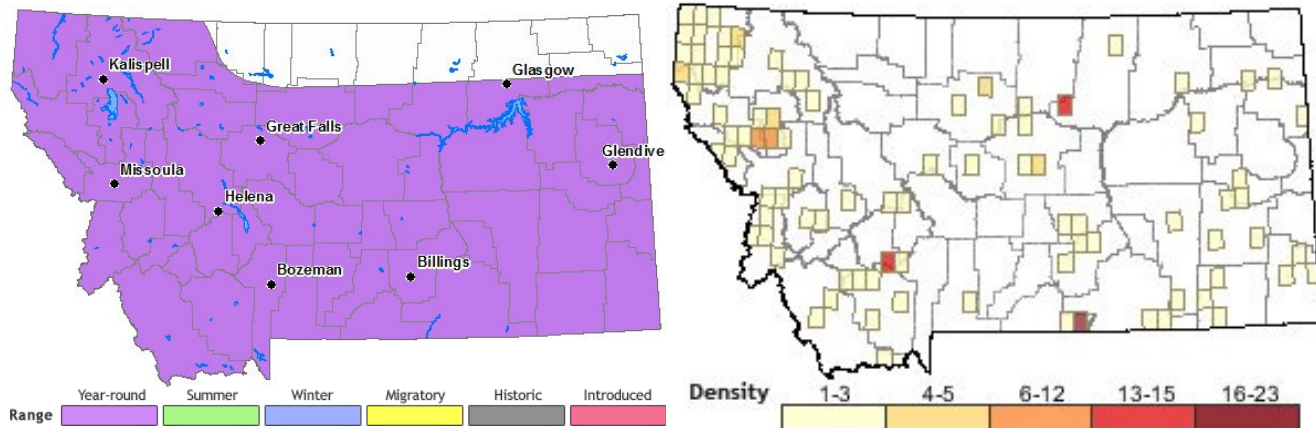
http://FieldGuide.mt.gov/detail_AMACC08010.aspx



Species of Concern

Global Rank: G4
State Rank: S2

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 239

General Description

Very large ears (30 to 39 millimeters) joined across forehead are a prominent feature in Townsend's Big-eared Bat; the tragus is long and pointed. The dorsal hairs are brownish at the tips, contrasting a little or considerably with the lighter underfur; ventral hairs are dark brownish-gray in color with brown to cinnamon tips. The hairs on the toes do not project beyond the toenails. There are two large, fleshy lumps on the snout, the basis for one of its common names, "lump-nosed bat." Total length is 90 to 113 millimeters; forearm length is 39.0 to 47.6 millimeters; adult mass is 5.0 to 13.5 grams. The greatest length of the skull is 15.2 to 17.4 millimeters; the skull has 36 teeth (Handley 1959, Kunz and Martin 1982, Nagorsen and Brigham 1993).

Habitat

Habitat use in Montana has not been evaluated in detail, but seems to be similar to other localities in the western United States. Caves and abandoned mines are used for maternity roosts and hibernacula (Worthington 1991, Hendricks et al. 1996, Hendricks 2000, Hendricks et al. 2000, Foresman 2001, Hendricks and Kampwerth 2001); use of buildings in late summer has also been reported (Swenson and Shanks 1979). Habitats in the vicinity of roosts include Douglas-fir and lodgepole pine forests, ponderosa pine woodlands, Utah juniper-sagebrush scrub, and cottonwood bottomland. In hibernacula, ambient temperatures ranged from -1.0 to 8.0 degrees (30 to 46 when torpid Townsend's Big-eared Bats were present) (Hendricks and Kampwerth 2001). Temperatures at maternity roosts are poorly documented; the temperature was 12 degrees (54 in mid-July near a colony in an abandoned mine in Lake County), and 18 degrees (66 in August near a colony in a large and relatively open cave chamber in Lewis and Clark County). Most caves and mines in Montana appear to be too cool in summer for use as maternity roosts.

Uinta Chipmunk - *Tamias umbrinus*

http://FieldGuide.mt.gov/detail_AMAFB02190.aspx



Species of Concern

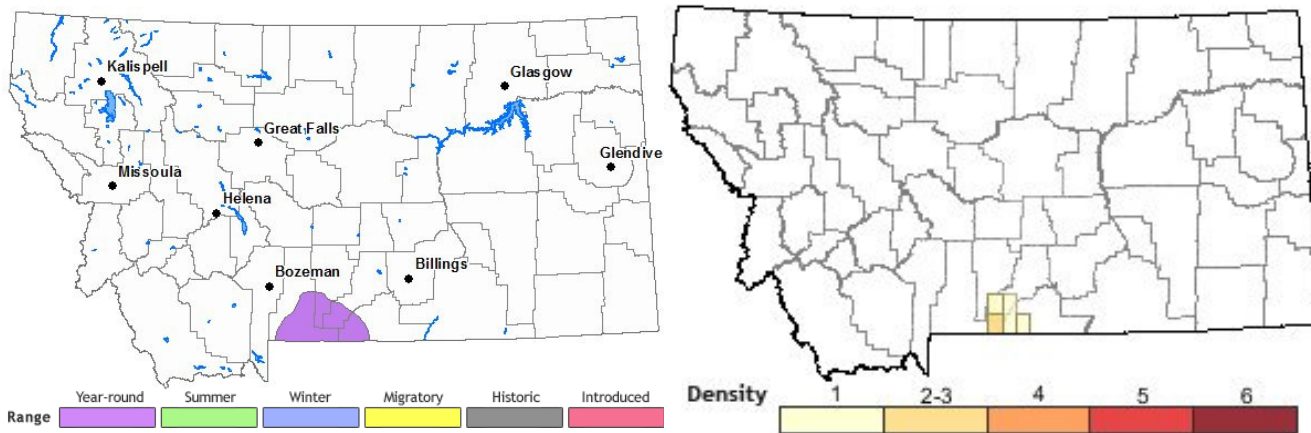
Global Rank: G5
State Rank: S3

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 6

General Description

The Uinta Chipmunk is a medium-sized chipmunk, with moderately distinct dorsal stripes and generally warm brownish pelage on the flanks, shoulders, and head. In some regions they may be difficult to distinguish from other chipmunk species by sight. The outermost stripe is white bordered by brown, not black. It is more likely to be seen in trees than other chipmunks sharing its range (Bergstrom 1999). Adults may attain the following body measurements: total length 200 to 243 millimeters; tail length 90 to 115 millimeters; hind foot 30 to 35 millimeters; ear 16 to 19 millimeters; weight 55 to 80 grams. Sexes are similar in size (Clark and Stromberg 1987). There are 22 teeth in the skull (dental formula: I 1/1, C 0/0, P 2/1, M 3/3), and the skull is more than 34 millimeters in length.

Habitat

Habitat use in Montana is unstudied and poorly described. The Uinta Chipmunk is found at high elevation in Carbon and southeastern Park Counties in subalpine forest and at treeline in krummholz vegetation, presumably subalpine fir-Engelmann spruce-whitebark pine (Pattie and Verbeek 1967).

Elsewhere, Uinta Chipmunks are known to frequent coniferous forests at moderate to high elevations (to upper treeline). In Wyoming, they are reported occupying spruce-fir forest, lodgepole pine-Douglas-fir forest, and ponderosa pine forest (Clark and Stromberg 1987). In Colorado, they have been reported in ponderosa pine-Douglas-fir forest (Bergstrom 1988). In more southern regions of the global range, they are most often associated with ponderosa pine habitats, but also are found in drier pinyon pine-juniper woodlands; in California and Nevada they also are found in bristlecone pine woodlands (Bergstrom 1999). They often are found near logs and brush in open areas and at forest edges, sometimes in forest with a closed canopy but an open understory. They excavate burrows beneath rocks and shrubs, but also are arboreal to some degree, spending a fair amount of time in trees and sometimes sleeping and nesting in tree cavities.

Uinta Ground Squirrel - *Urocitellus armatus*

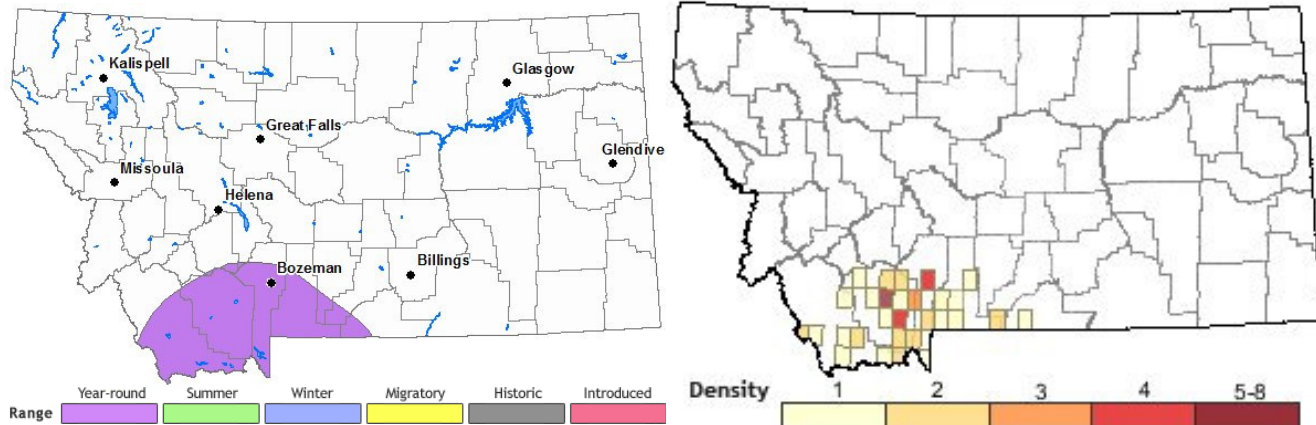
http://FieldGuide.mt.gov/detail_AMAFB05050.aspx



Potential Species of Concern

Global Rank: G5
State Rank: S3S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 53

Habitat

Sub alpine meadows and forest edge. Often near water, and take advantage of moist site succulent greens.

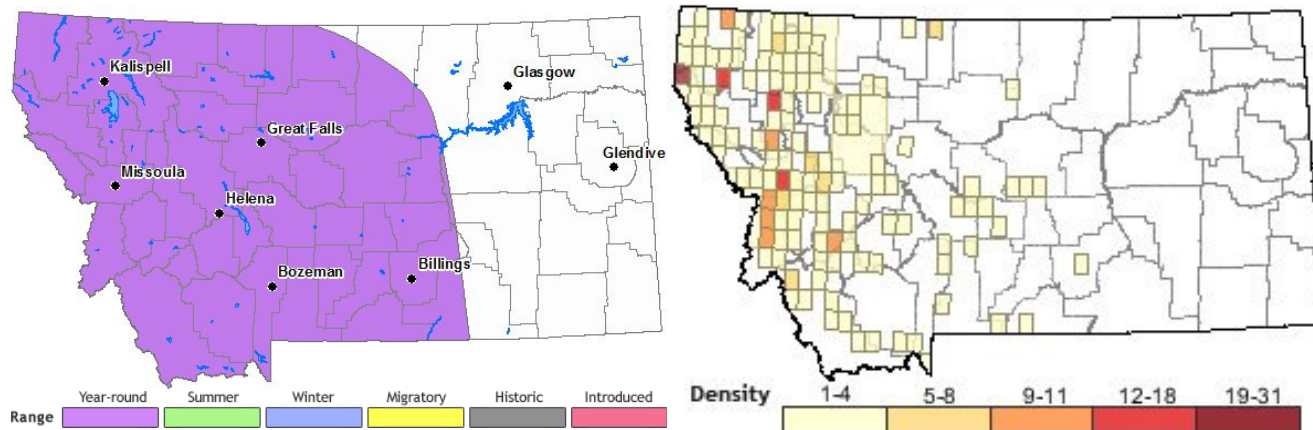
Vagrant Shrew - *Sorex vagrans*

http://FieldGuide.mt.gov/detail_AMABA01070.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 445

General Description

Pacific coast: tine present on anteriomedial edge of I1; tail distinctly bicolored in young, indistinctly bicolored in adults; never more than 4 pairs of friction pads on the second to fourth digits of hind feet; level of pigmentation at or below level of median tine on I1; body size small to medium; U5 triangular, body of U1s not touching, P4 overlapping U5; zygomatic process of maxillary pointed (Carraway 1990).

Habitat

At elevations below 5000 ft, usually Douglas-fir, lodgepole pine, western larch, grand fir, western red cedar forests (Hennings and Hoffmann 1977). Often found in moist sites (Hoffmann and Pattie 1968).

Virginia Opossum - *Didelphis virginiana*

http://FieldGuide.mt.gov/detail_AMAAA01010.aspx



Exotic Species (not native to Montana)

Global Rank: G5

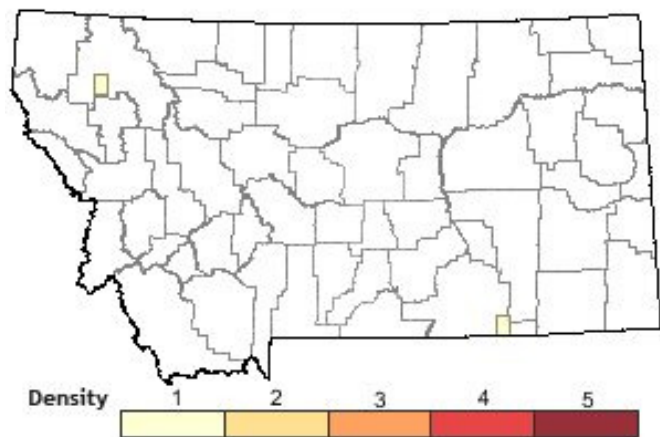
State Rank: SNA

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 2

Water Shrew - *Sorex palustris*

http://FieldGuide.mt.gov/detail_AMABA01150.aspx



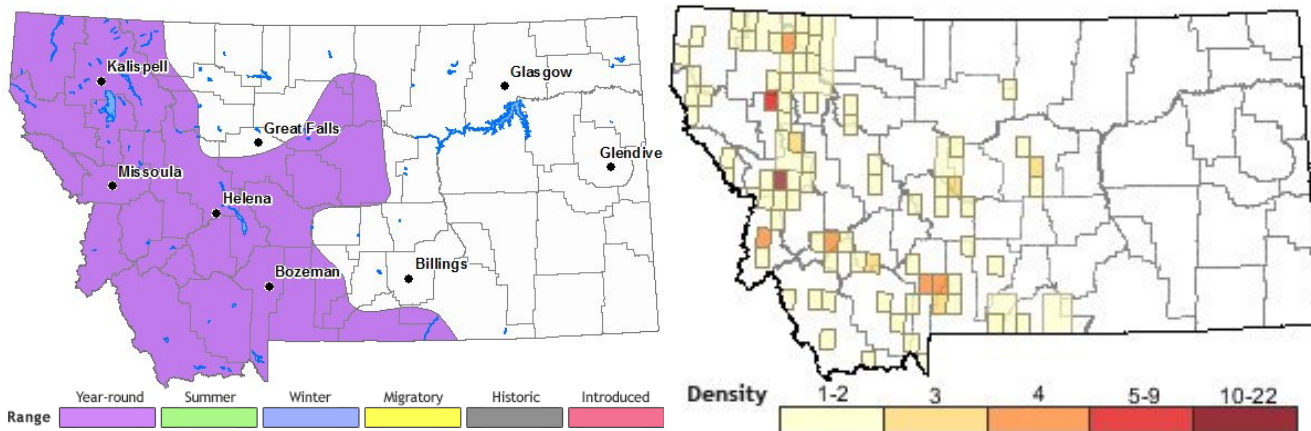
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 161

General Description

A large, semiaquatic, blackish-gray shrew with a long bicolored tail and large hind feet fringed with short stiff hairs. Total length is 14 to 16 cm (5.5 to 6.3 inches) including a 6 to 8 cm (2.4 to 3.1 inch) tail. The dense fur is glossy blackish gray above and paler or silvery beneath. Middle toes of hind feet (18 to 20 mm) are partially webbed. For good descriptions and illustrations see Burt and Grossenheider (1976), Godin (1977), Hall (1981), Beneski and Stinson (1987), Clark (1987), and Merritt (1987). The sexes are similar in size and color. Sexually active males (February to September) have prominent dermal glands on each side between fore and hind legs. They show in *S. p. navigator* as an 8-mm oval patch of white hair (Conaway 1952). Immatures are similar in color to adults. The skull is large and heavy for a shrew, generally more than 19.5 mm long in *S. p. punctulatus*. The first two unicuspid teeth are noticeably larger than the next two (Banfield 1974), the third unicuspid is smaller than the fourth (Godin 1977), and the fifth is greatly reduced (Pagels 1986). For comparative illustrations of shrew dentition, see Conaway (1952), Banfield (1974), Churchfield (1990). The teeth of North American shrews show some reddish brown pigmentation. Scats of Water Shrews are quite distinctive, black and granular in structure, being full of remains of invertebrate exoskeletons. They are often deposited in middens on the banks of streams, in surface burrows, at burrow entrances, in the lee of rocks at the stream edge, or even sometimes quite prominently on the tops of stones (Churchfield 1990). Water Shrew hairs are roughly H-shape in cross section, with inner surfaces deeply ridged (see illustration in Churchfield 1990).

Habitat

In streamside habitat in coniferous forests, particularly in or under overhanging banks or crevices; prefer good cover (Conaway 1952). However, also found in seasonal streams and small seeps (Kinsella 1967). Also above timberline (Hoffmann and Pattie 1968).

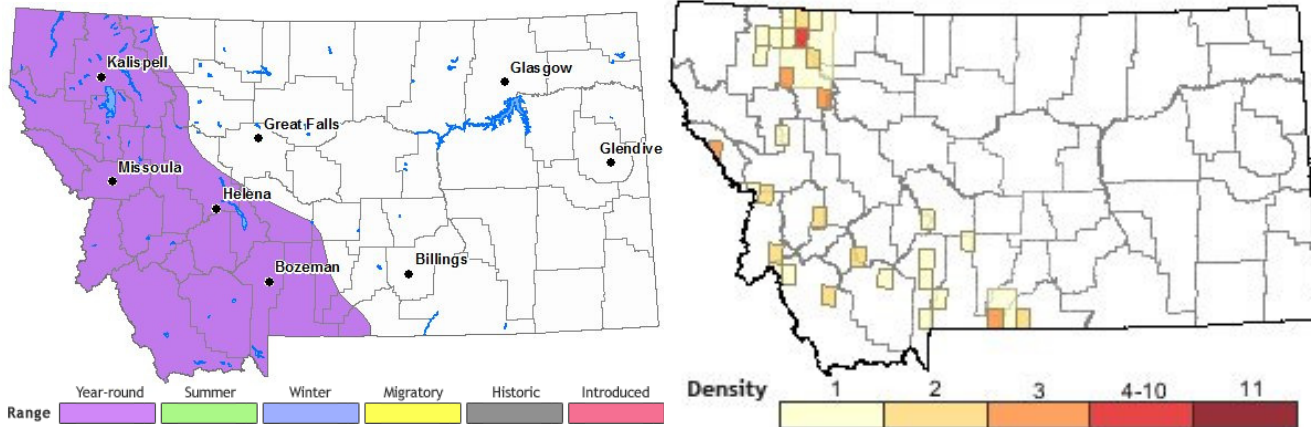
Water Vole - *Microtus richardsoni*

http://FieldGuide.mt.gov/detail_AMAFF11190.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 57

General Description

The Water Vole, also known as a water rat or Richardson Vole, is the largest vole in Montana. At over 9 inches and around 4 ounces, the male adult is about twice the length and four times the weight of other voles in the state. Long fur covers water voles, dark brown to reddish brown on top, and gray, mixed with white or silver on their bellies. They have long bicolored tails and enlarged flank glands during breeding season (Zeveloff 1988). Foresman (2001) points to the long hind feet and protruding incisors as other characteristics that distinguish these very large, semiaquatic voles.

Habitat

Semi-aquatic. Near streams and lakes in subalpine and alpine zones. Normally above 5000 ft. in western mountains. Moist grass and sedge areas, streamside hummocks overhung with willows (Hoffmann and Pattie 1968, Pattie 1967).

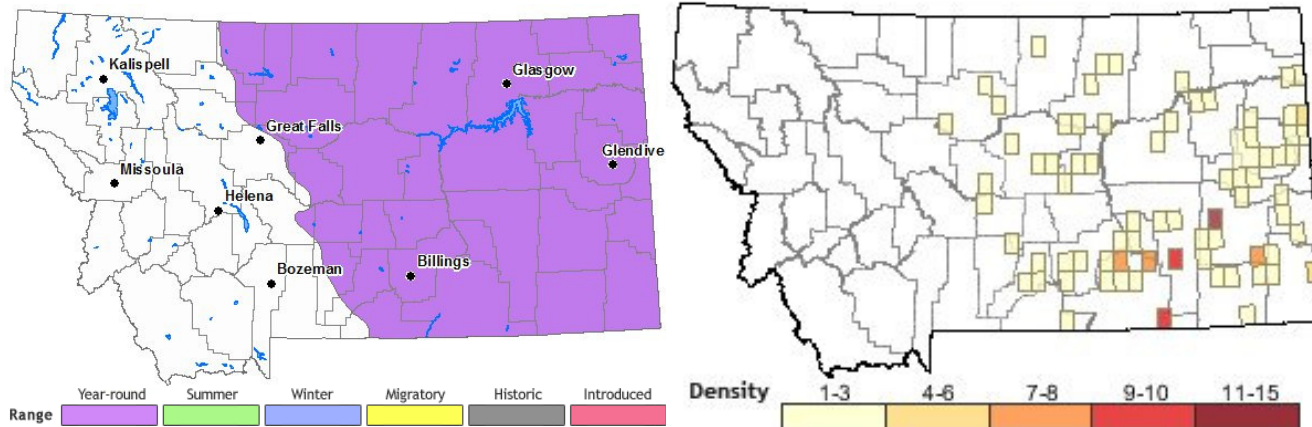
Western Harvest Mouse - *Reithrodontomys megalotis*

http://FieldGuide.mt.gov/detail_AMAFF02030.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 187

General Description

The relatively small Western Harvest Mouse averages 5 1/2 inches long and less than 1/2 ounce in weight. Its scaly tail comprises more than half of its length. The upper fur and tail color appears grayish brown, with a darker midline and buffy sides. Below, tail and body are white or grayish. Along with the nearly hairless bicolored tail, large ears and a groove running down the front of each incisor help differentiate the Western Harvest Mouse from similar mammals.

Habitat

Dense grassy areas, sage-grassland.

Western Jumping Mouse - *Zapus princeps*

http://FieldGuide.mt.gov/detail_AMAFH01020.aspx



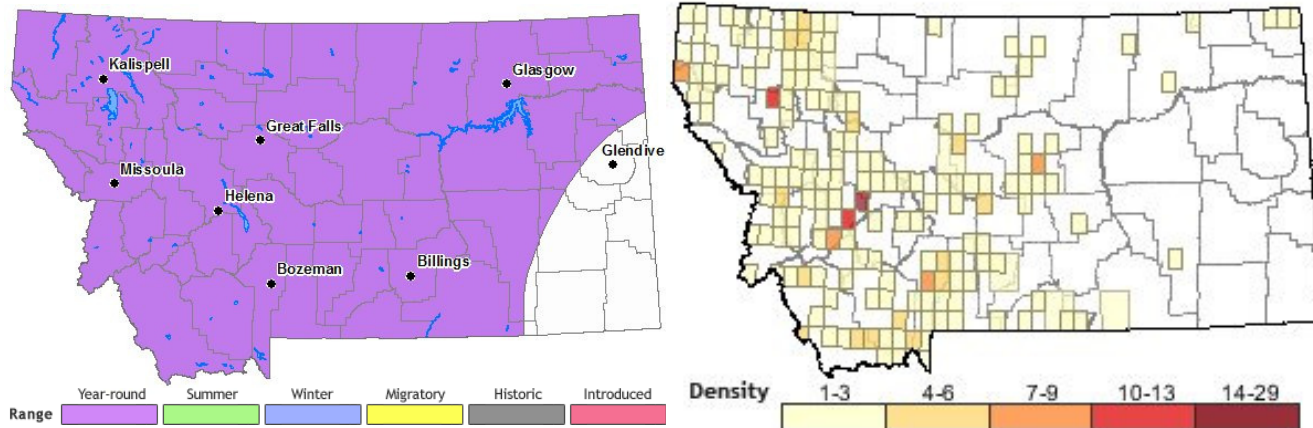
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 489

Habitat

Usually tall grass along streams, with or without a brush or tree canopy. Also dry grasslands in north-central MT. Mesic forests with sparse understory herbage in western MT. From valley floors to timberline and alpine wet sedge meadows (Hoffmann and Pattie 1968).

Western Small-footed Myotis - *Myotis ciliolabrum*

http://FieldGuide.mt.gov/detail_AMACC01140.aspx



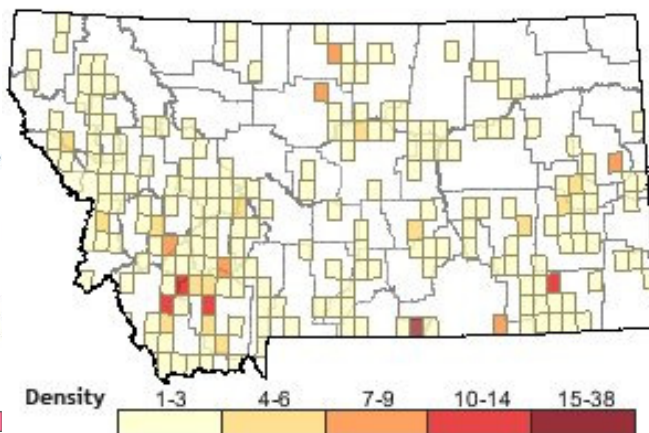
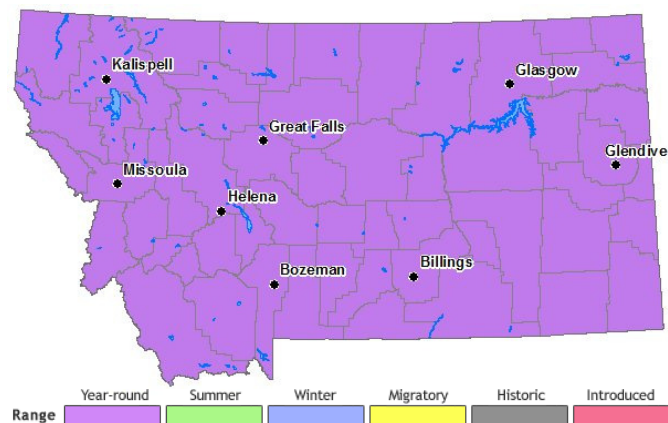
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 602

Habitat

No available information.

Western Spotted Skunk - *Spilogale gracilis*

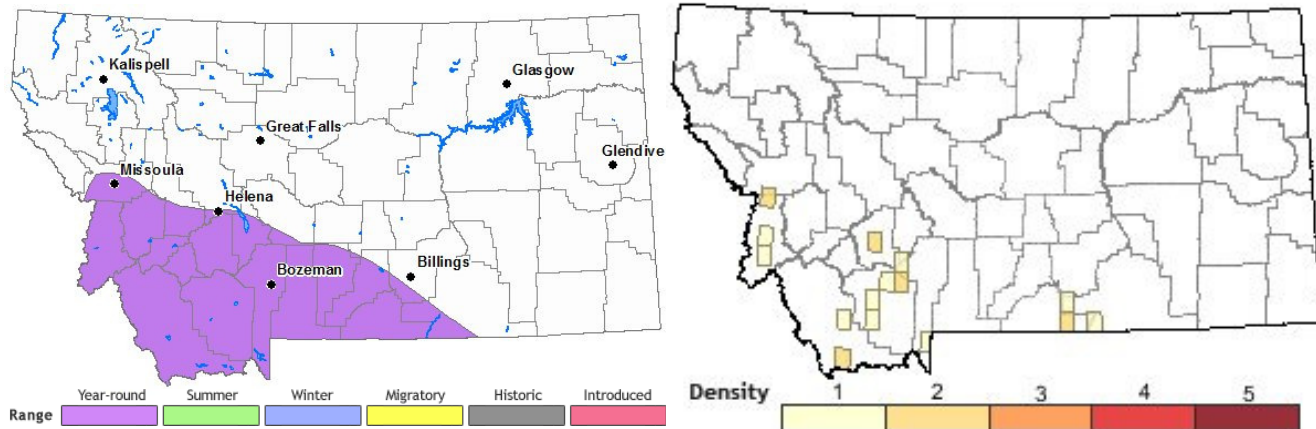
http://FieldGuide.mt.gov/detail_AMAJF05020.aspx



Species of Concern

Global Rank: G5
State Rank: S1S3

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 20

General Description

The Western Spotted Skunk is a small, relatively slender skunk with glossy black fur interrupted with distinct white stripes on the forward part of the body. The posterior part of the body has two interrupted white bands with one white spot on each side of the rump and two more at the base of the tail. The pattern of white lines and spots is individually unique. The top of the tail is black and the underside is extensively white. The tip of the tail is white. A white spot is present on the forehead and another in front of each ear. External measurements in males average 411 millimeters in total length, 122 millimeters for the tail and 50 millimeters for the hind foot. In females, external measurements average 387 millimeters in total length, 116 millimeters for the tail, and 47 millimeters for the hind foot. Males weigh about 630 grams, whereas females weigh about 450 grams (Foresman 2001).

Habitat

The habitat of the Western Spotted Skunk in Montana is not well known, but they have been found in arid, rocky and brushy canyons and hillsides. Information from other portions of its range suggest that when they are inactive or bearing young they occupy a den in rocks, burrows, hollow logs, brush piles, or under buildings.

White-footed Mouse - *Peromyscus leucopus*

http://FieldGuide.mt.gov/detail_AMAFF03070.aspx



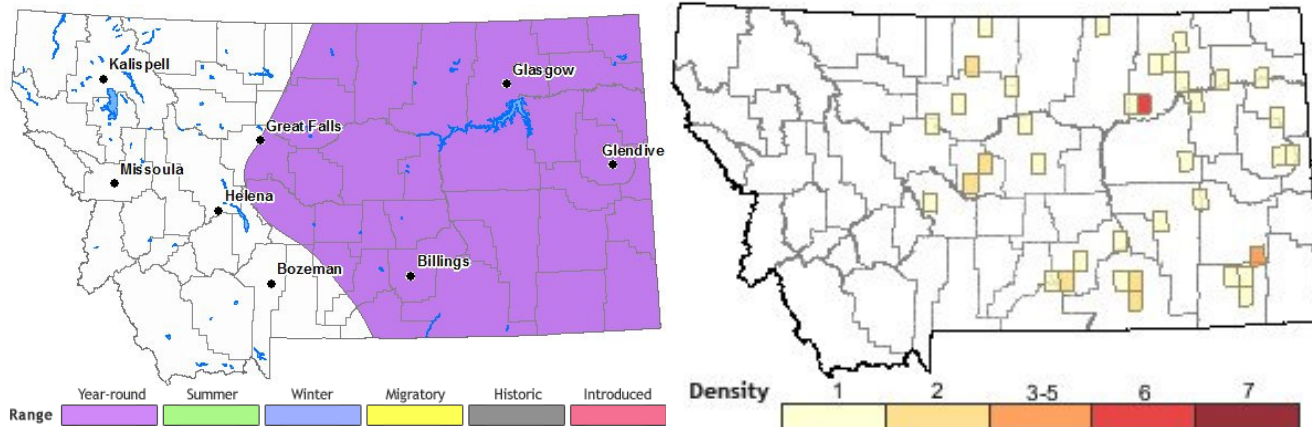
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 52

General Description

Adults are reddish brown (juveniles gray), with a white belly, white feet, membranous ears, and bicolored tail (usually not sharply bicolored); adult total length 145 to 205 mm, tail 62 to 97 mm (usually shorter than head and body), hind foot 18 to 24 mm, ear 13 to 19 mm; 16 to 29 g in the northeastern U.S.; 3 pairs of mammae (Paradiso 1960, Godin 1977, Hall 1981).

Habitat

Riparian woodland, dendritic distribution, uses thickets, shrubs. Nest 7 inches in diameter of plant materials.

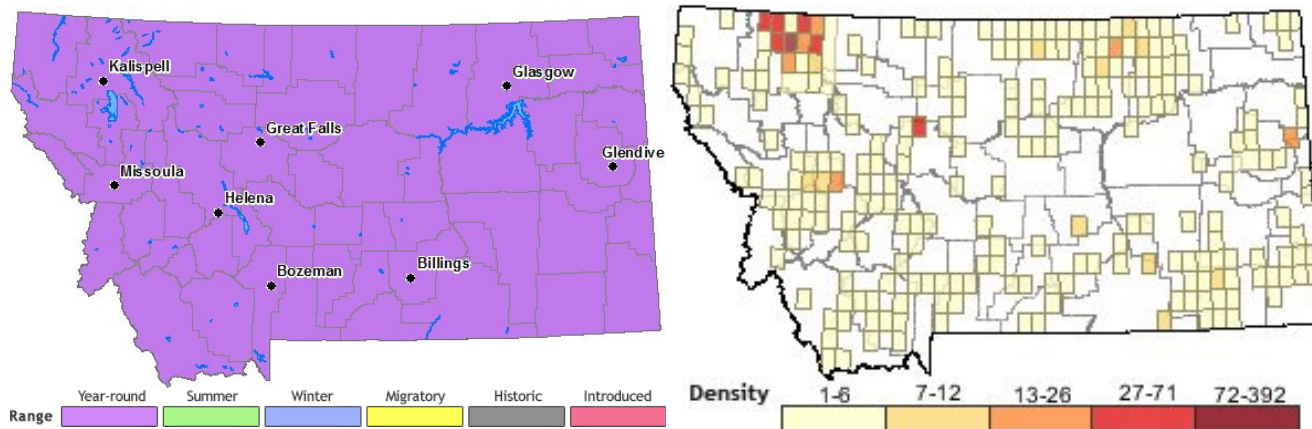
White-tailed Deer - *Odocoileus virginianus*

http://FieldGuide.mt.gov/detail_AMALC02020.aspx



Global Rank: G5
State Rank: S5

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 2072

General Description

Coat grayish-brown in winter, reddish-brown in summer; underside of foot-long tail white; antlers consist of main beams, generally with three to five tines projecting upward; brow tines long; outside of lower hind foot has a small, teardrop-shaped scent gland; mature bucks weigh 250 to 275 lbs. on good range, does 160 to 180. Occupy small home ranges, do not migrate far; mostly nocturnal and secretive; solitary much of the time but form small groups in favored feeding areas; when alarmed or running, erect and wag their tails, causing white underside to flash.

Habitat

River and creek bottoms; dense vegetation at higher elevations; sometimes open bitterbush hillsides in winter. In western MT, mature subclimax coniferous forest, cool sites, diversity and moist sites important in summer (Leach 1982). In winter prefer dense canopy classes, moist habitat types, uncut areas and low snow depths (Berner 1985).

White-tailed Jack Rabbit - *Lepus townsendii*

http://FieldGuide.mt.gov/detail_AMAEB03040.aspx



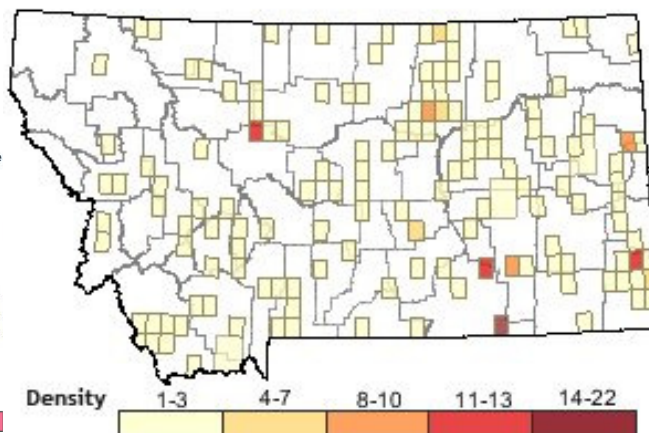
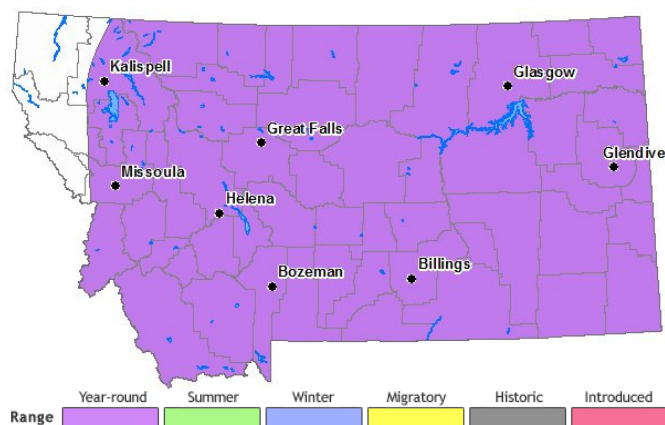
Global Rank: G5
State Rank: S4

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 329

Habitat

Sage-grassland types. Open areas, retreats to woodlots and riparian only during severe winters (Jones et al. 1983).

White-tailed Prairie Dog - *Cynomys leucurus*

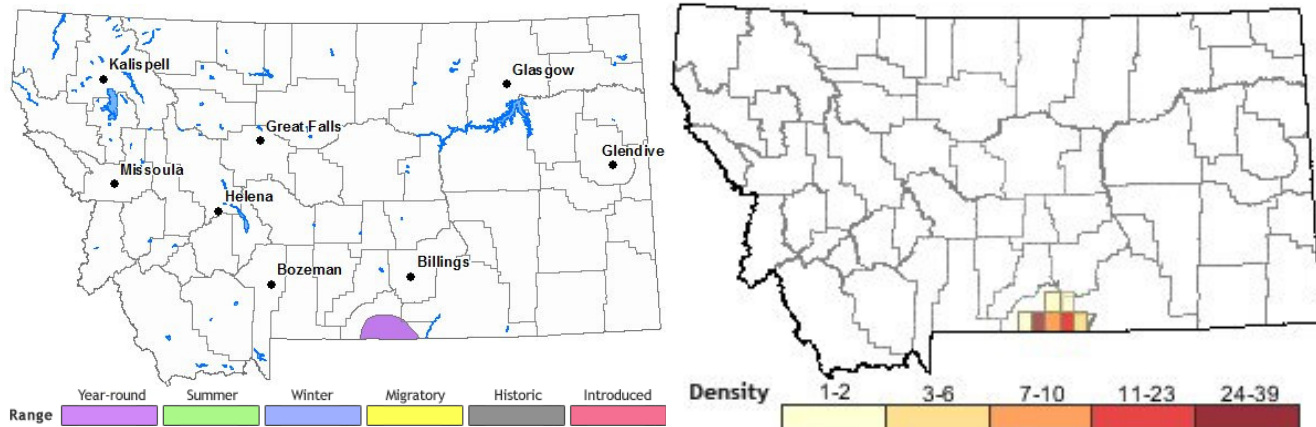
http://FieldGuide.mt.gov/detail_AMAFB06020.aspx



Species of Concern

Global Rank: G4
State Rank: S1

AGENCY STATUS
USFWS:
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 82

General Description

White-tailed Prairie Dogs are medium-sized squirrel-like rodents and are smaller than the only other prairie dog found in Montana, the Black-tailed Prairie Dog (*Cynomys ludovicianus*). Adults weigh around 500 grams and males are about 36 centimeters long and females 31 centimeters long (Foresman 2001). The legs are short and the feet have well developed claws for digging. The tail is short and flattened and has a whitish tip. The back is a yellowish-buff mixed with black that becomes lighter on the belly. They also have distinctive brownish-black patches above the eyes and on the cheeks.

Habitat

Throughout their range, White-tailed Prairie Dogs inhabit xeric sites with mixed stands of shrubs and grasses. In Montana they inhabit these habitats dominated by two types of vegetation: areas with Nuttall saltbrush with lesser amounts of big sage, and areas with poverty sumpweed and winter fat (Flath 1979). They live at higher elevations and in meadows with more diverse grass and herb cover than do Black-tailed Prairie Dogs (Hoffmann, in Wilson and Ruff 1999) and their range in Montana is at higher elevations than other areas across their distribution.

Wolverine - *Gulo gulo*

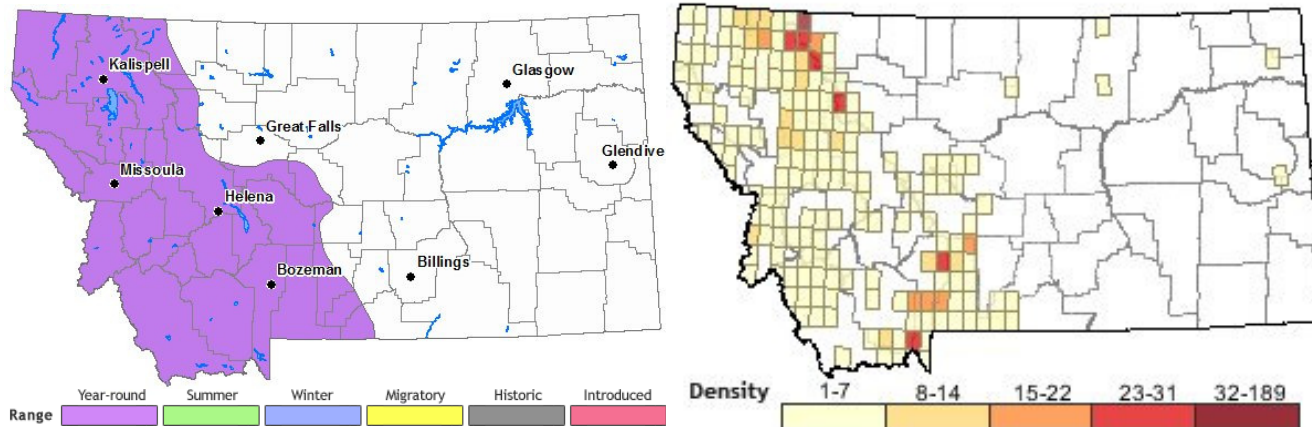
http://FieldGuide.mt.gov/detail_AMAJF03010.aspx



Species of Concern

Global Rank: G4
State Rank: S3

AGENCY STATUS
USFWS: C
USFS: SENSITIVE
BLM: SENSITIVE



Number of Observations: 1315

General Description

The Wolverine is a bear-like mustelid with massive limbs and long, dense, dark brown pelage, paler on the head, with two broad yellowish stripes extending from the shoulders and joining on the rump. Variable white or yellowish markings are often present on the throat and chest. The tail is bushy. The feet are relatively large (6.5 to 11.3 centimeters total length) with robust claws. Wolverines weigh between 7 and 32 kilograms and range from 0.9 to 1.1 meters in length. Females average about 10% less than males in linear measurements and 30% less in mass (Ingles 1965, Hall 1981, Nowak 1991).

Habitat

Wolverines are limited to alpine tundra, and boreal and mountain forests (primarily coniferous) in the western mountains, especially large wilderness areas. However, dispersing individuals have been found far outside of usual habitats. They are usually in areas with snow on the ground in winter. Riparian areas may be important winter habitat. When inactive, Wolverines occupy dens in caves, rock crevices, under fallen trees, in thickets, or similar sites. Wolverines are primarily terrestrial but may climb trees.

In Montana, Hornocker and Hash (1981) found most Wolverine use in medium to scattered timber, while areas of dense, young timber were used least. Wolverines avoided clearcuts and burns, crossing them rapidly and directly when they were entered at all. Hash (1987) reported Wolverines in the Northern Rocky Mountain region were associated with fir, pine, and larch. Aspen stands were also used, as were cottonwoods in riparian areas. Ecotonal areas appeared to be important habitat components (Hash 1987). Hatler (1989) believed Wolverines are not dependant on any particular vegetative habitat type. Banci (1986) reported "habitat requirements appear to be

large, isolated tracts of wilderness supporting a diverse prey base, rather than specific plant associations or topography." South of the boreal forest, most habitat descriptions in the literature agree with Grove's (1988) characterization of "large, mountainous, and essentially roadless areas."

Woodland Caribou - *Rangifer tarandus caribou*

http://FieldGuide.mt.gov/detail_AMALC04011.aspx



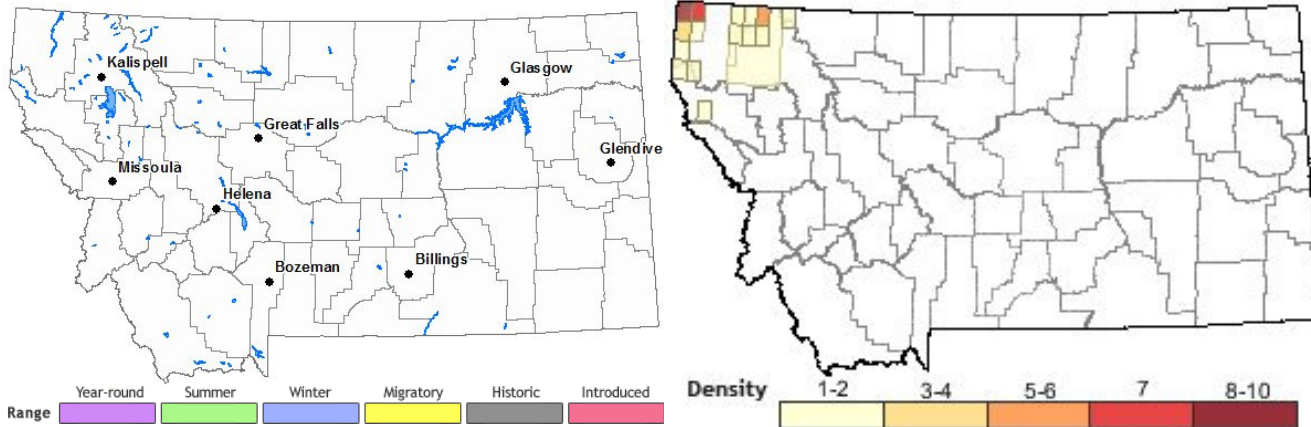
Global Rank: G5T4
State Rank: SX

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 45

Habitat

Spring: follow green-up, lower elevations, open timber; females calve at higher elevation slopes and ridges. Summer: mature spruce-fir, north slopes; rut habitat similar, moister, denser. Early Winter: old growth cedar-hemlock. Late Winter: mature subalpine fir.

Wyoming Ground Squirrel - *Urocitellus elegans*

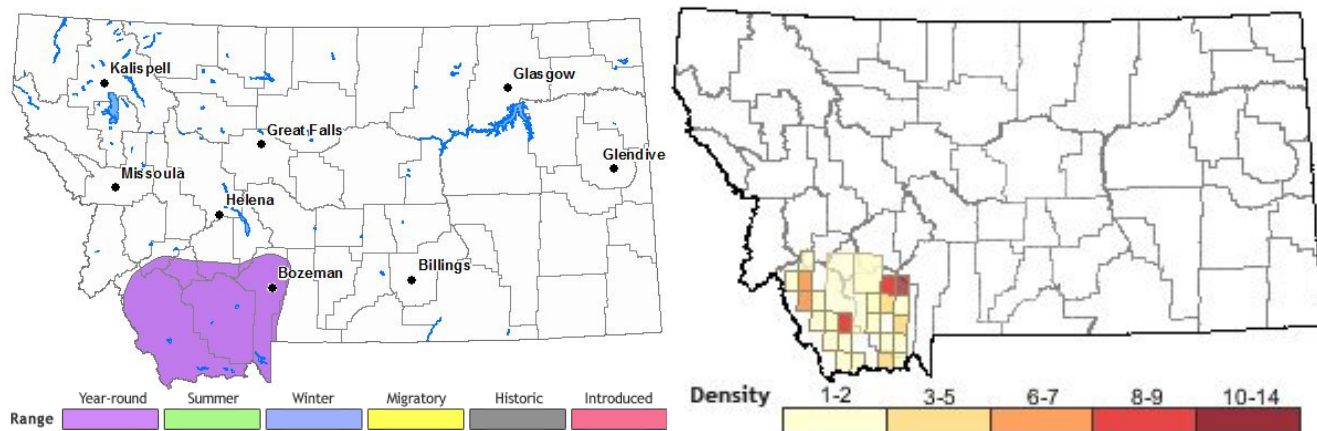
http://FieldGuide.mt.gov/detail_AMAFB05190.aspx



Potential Species of Concern

Global Rank: G5
State Rank: S3S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 89

Habitat

Primarily valley bottoms and foothills.

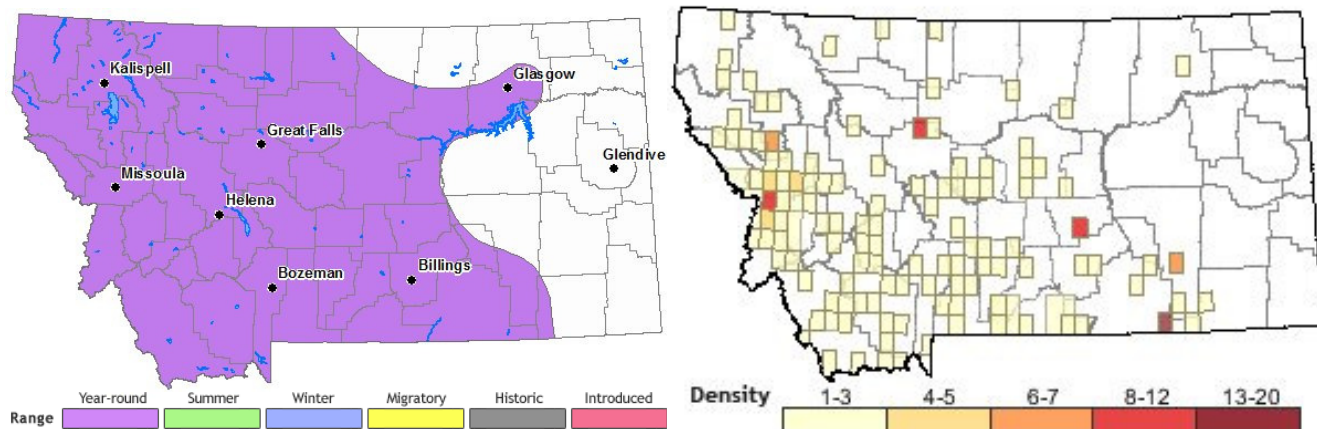
Yellow-bellied Marmot - *Marmota flaviventris*

http://FieldGuide.mt.gov/detail_AMAFB03020.aspx



Global Rank: G5
State Rank: S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 267

Habitat

Semi-fossorial. Inhabits talus slopes or rock outcrops in meadows. Abundant herbaceous and grassy plants nearby. Rocks support burrows and serve as sunning and observation posts. Avoids dense forests.

Yellow-pine Chipmunk - *Tamias amoenus*

http://FieldGuide.mt.gov/detail_AMAFB02030.aspx



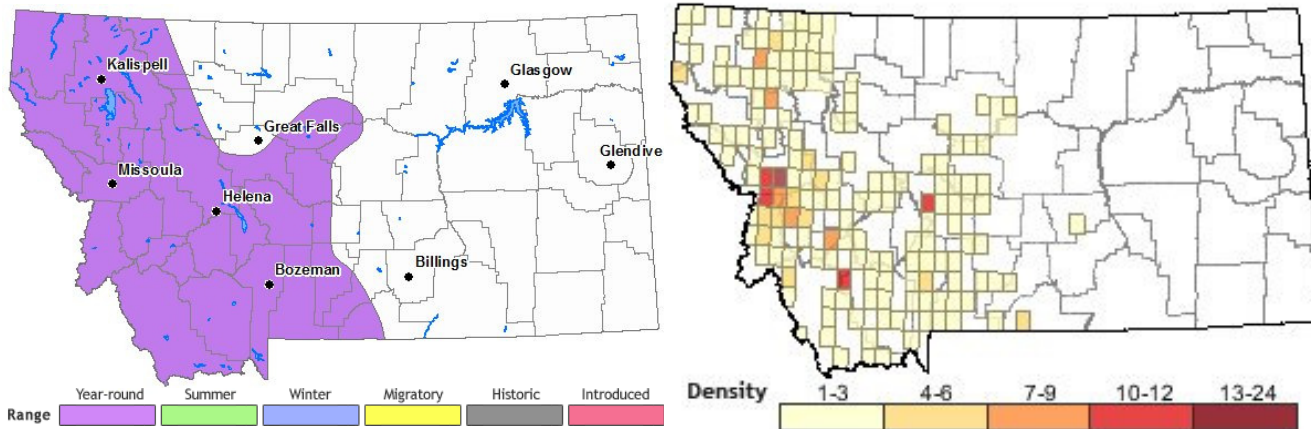
Global Rank: G5
State Rank: S5

AGENCY STATUS

USFWS:

USFS:

BLM:



Number of Observations: 465

Habitat

In western MT, uses open stands of ponderosa pine and Douglas-fir. Will use open grassland if cover is adequate. In absence of *T. ruficaudus* and *T. minimus* in central MT, *T. amoenus* ranges into subalpine forests and alpine tundra (Hoffmann and Pattie 1968, Beg 1969).

Yuma Myotis - *Myotis yumanensis*

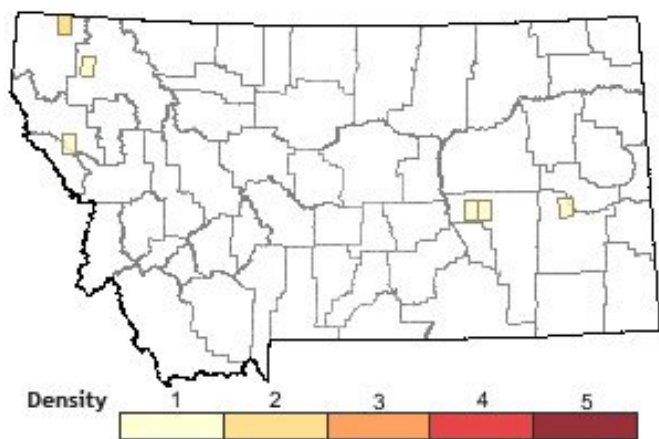
http://FieldGuide.mt.gov/detail_AMACC01020.aspx



Potential Species of Concern

Global Rank: G5
State Rank: S3S4

AGENCY STATUS
USFWS:
USFS:
BLM:



Number of Observations: 7
